# Engineering the Future

CARBORUNDUM UNIVERSAL LIMITED
ANNUAL REPORT 2017-2018

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Note: Across this report, the word "CUMI" refers to "Carborundum Universal Limited."

### Cautionary Statement



The product displayed in the wrapper is our gold coated metallised ceramic substrates used in microwave integrated circuit for space applications.

As the World races ahead to the frontiers of a New Age of Technology, Materials Science will determine the Future of Human Civilization.

Materials with the potential to completely transform the world, are being discovered and are waiting to usher in disruptive innovation like nothing we have ever seen before.

At CUMI, with our mission of Making Materials Matter, we understand the need for disruption readiness, to transform, push boundaries, innovate, accelerate and demonstrate a pioneer's will for

**Engineering the Future…**

# Engineering the Future with integrated, smart factories, interoperability, technology platforms…

As a Materials Science Company, we are constantly driven by the changes in technologies, processes and market trends, affecting the varied industries we serve.

Our operational and domain expertise in more than 50 technology platforms covering materials, processing and applications has enabled us to be in the forefront of technological advancement.

Interconnected smart factories, with IoT enabled Equipment and Machinery, manufacturing capabilities with real time tracking of efficiencies, breakthrough processes, transformational technologies, accelerated delivery cycles - at CUMI, Industry 4.0 model of operations was cascaded across Plants.

Key initiatives undertaken to accelerate the transition:

## Abrasives

- Consolidated manufacturing capabilities to leverage locational advantage, rationalise product spread and logistic chain by re-locating and scaling up of the Thin Wheel manufacturing facility from China to Maraimalai Nagar to address the growing domestic market.
- Modernised and augmented capacity of the Coated Maker Plant at Kolkata to 4 million sq metres.
- Rationalised the Thin Wheel manufacturing capacity at Uttarakhand.
- Migrated to Plant digitisation with CUMI Connect App and IoT enabled Equipment and Machinery with real time tracking of OEE and process efficiencies.
- Modernised the manufacturing lines for newgen gear grinding wheels with high stock removal properties, to address the growing auto space.

## Electrominerals

- Established a large fusion facility for the manufacture of Zirconia bubbles. The new facility combined with our existing Electrominerals Plant makes us the largest producer of Bubble Zirconia in the world, providing access to new markets, newer applications.
- Commissioned a state-of-the-art, high capacity, efficient, fusion facility for regular and specially fused alumina.

## Ceramics

- Established a new facility for Thin Film Metallisation.
- Started a Pilot Plant for Tape Casting and Physical Vapour Deposition by Sputtering, a unique capability matched by very few.

Manufacturing capabilities for scale and agility, to address emerging markets and integrate futuristic technology platforms, is integral to CUMI's mission of Engineering the Future.


IoT enabled operations at Tiruvottiyur

Bubble Zirconia Plant, Edappally

IoT enabled smart products, application-interface maximising process efficiencies, future driven R&D incubating innovation breakthroughs, patent protected products and processes, domain expertise with new age materials - Engineering the Future was on full throttle at CUMI.

## Abrasives

Ultra high speed grinding technologies, with stringent requirements in efficiency, close tolerance and quality are becoming an industry norm. CUMI's abrasive wheels have redefined grinding applications with their significant performance characteristics, offering high throughput, dimensional and thermal integrity, along with superior mechanical properties.

### Products with design registration:

- The Fibonacci series of F Type, profiled wheels, with greater cutting and cooling efficiencies, saving time and energy for the automobile and bearing industry.
- IoT enabled, grinding wheel which monitors real time temperature in the grinding zone, applying necessary changes to the grinding parameters. This enables burn free, grinding of high value components.
- High precision wheels for grinding crankshaft and super alloys like Inconel and Titanium for Fastners used in Aerospace applications.
- Collaborative development of unique grain and bond systems with the Electrominerals division.
- Spring grinding wheel, with very large diameter of 1500 mm for heavy duty applications in the Railway industry. A capability matched by very few Abrasive manufacturers in the world.
- Film backed, Coated Abrasives for fine polishing in ferrous and non ferrous, metal, glass and composite applications.
- 'Fero' light weight wheels with fibre reinforced polymer core for very high speed grinding applications. A patented product, engineered in collaboration with CUMI's Prodorite Division. In addition to its superior performance properties, the reusable fibre core reduces wastage, cost and carbon footprint, promoting sustainable processes - an important enabler in Engineering the Future.

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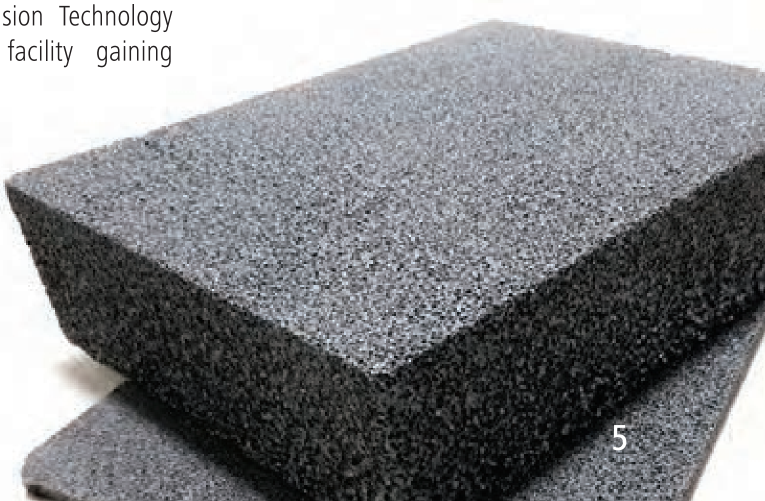
## Electrominerals

The Electrominerals division developed a range of application specific materials for diesel particulate filter, high performance Abrasive materials for battery and Engineered Ceramics and high and low temperature insulations.

## Super Refractories & Prodorite

- Emerging technologies in composites are replacing conventional materials in many applications and also eliminating the limitations of manufacturing large parts. CUMI augmented the Vacuum Infusion Technology at its Ranipet facility gaining the capability to manufacture large parts for niche applications in emerging industries such as Nacelle Cover for Wind Mills, Rail Coach interiors, etc.
- Developed a Carbon Fibre Reinforced Plastic (CFRP) core wheel material with superior performance characteristics for high speed grinding applications.
- Started the manufacture of WEARSHIELD, range of wear solutions, offering both durability and flexibility in operations.
- Created additional opportunities in horizontal deployment as import substitute for the replacement market.
- Designed and developed an import substitute for a Ceramic material used for Wear application.



*SiC Foam*


## Engineering the Future with new age materials, disruptive innovation…

### Ceramics

The Industrial Ceramics division filed several patents for innovative product and process designs, few of them for:

- Silicon Carbide Graphite Composite Material and Process.
- Zirconia Toughened Alumina Ceramic Composites.
- Partially Stabilized Zirconia & Zirconia Toughened Alumina based Ceramic Minimedia.
- Ceramic Reinforced Bulk Metallic Glass Composite.
- Early warning Wear Detection System.

In addition, a range of Ceramic products were developed for niche and specialised applications.

- Foraying into thin film Metallised Ceramic Substrate for Space and Ground Applications. CUMI would be the 1st Indian Company and among a select few globally to have Thin Film Metallised Ceramic Products in its portfolio.
- CUMITHERM-Z -Zirconia products for Thermal & Thermo-wear protection applications for Steel and Power Plant applications.
- Zirconia Toughened Alumina for Wear & Impact Resistance Applications.
- Zirconia based Ceramic Minimedia by Drip Casting Process, a collaborative engineering project with Electrominerals.
- Development of Hydrothermal Grade of Zirconia for High Performance Seals for the European Market.
- Development of in situ Stabilised Magnesia, partially Stabilised Zirconia and Yttria partially Stabilised Zirconia, for advanced structural applications.
- Initiated the development of Multi-Layer Co-Fired Ceramics (MLCC) for strategic applications. Trials are under progress with processes such as Debinding, Co-firing, Nickel plating and brazing for higher variants of the substrates.
- CUMITUFF 96 for Premium Wear and Thermal Applications.
- Collaborative Projects with Indian Institute of Technology, Madras for Nano and cutting edge technologies.
- Indigenised Armour Product Development.

*Cluster of newgen products*

## Engineering the Future with collaborative partnering with customers & channel partners…


The Company continued its Industry 4.0 drive for 'smart manufacturing' with 'CUMI Connect' an IT Enabling Platform, providing digitisation and integration of all operations across its value chain. With real time data capturing from research and development to operations planning to marketing and sales, CUMI Connect has redefined efficiencies, reduced lead times and has proven to be a game changer in customer connectivity.

Advanced engineering mandates precision manufacturing with stringent levels of accuracy, precision, and complex part geometry. To ensure adherence to high quality standards, CUMI measures and tracks high speed machining processes at the Surface Technology Centre, a state-of-the-art simulation lab, before the products are launched in the market.

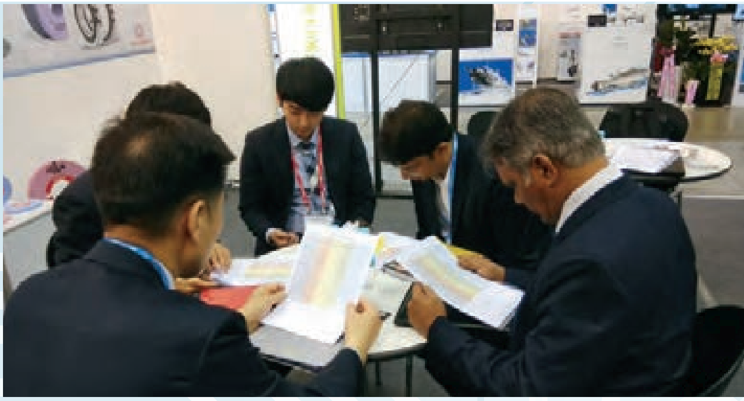
Customer engagement at major international industrial fairs and meets and Joint Development Plan agreements, added to new learnings and collaborative projects in advanced materials and alternate technologies.

CUMI's Electrominerals division achieved a technology leap with 'Boehmins'- a patented, speciality alumina project, slated for commercial production to create a variety of aluminas for specific, advanced applications.

Foraying with proprietary technology for manufacturing an array of nano materials including graphene, carbon nano tubes and its variants for advanced and emerging applications is an integral part of the Company's plans for Engineering the Future.

*Customer interface at various trade fairs*

*Pilot Plant for 'Boehmins' patented Speciality Alumina*



## Engineering the Future with application expertise and customised solutions…

Super Refractories division continued its leadership position in engineering and application expertise in customised, high performance materials, for a wide spectrum of industries such as:

- Abrasion Resistant FRP products for Flue Gas Desulphurization applications in coal fired thermal power plant.
- High performance refractory for 2000 degree Celsius, high temperature applications in Carbon Black Industry.
- Shaped Dome refractory for Petrochemicals.
- Refractory lining material for applications in the Glass Industry.
- Silicon Carbide Kiln furniture, tiles and beams for the Ceramic Industry.
- High temperature Refractory for the Rocket Launching Pad of ISRO.

*Shaped Dome refractory for Petrochemical industry*

Leveraging on its cross industry engineering capabilities and technical expertise, CUMI continued to build collaborative alliances and technical partnerships with customers and channel partners in each of its businesses, to offer products and solutions for Engineering the Future.


*Spring grinding wheel, with very large diameter of 1500 mm for the Railway industry.*

# Exploring new frontiers and Engineering the Future…

From large diameter wheels and Refractory domes to ultra fine grains and wafer thin substrates, from high speed grinding operations to exploring new possibilities in engineering surfaces, CUMI is building capabilities for the dynamically changing New Age of Technology and Materials Science.

*NTK project at Hosur*

*Customer collaboration*

Accelerating change and transformation with advanced manufacturing and design capabilities, sustainable processes, empowered people force, innovation led products, path breaking research, customer partnering, value creation and increasing global footprint - CUMI is ready to explore new frontiers in Engineering the Future.


*Installation Experts*


Corporate Governance Award


HR Excellence Award

## Engineering the Future with a collaborative workforce, empowered to deconstruct, design-think…

Our diverse, multi-cultural, 5,000 plus, people base, spanning 5 continents, provides us a dynamic and collaborative eco system, to share learnings, transact and do business in different countries across the world.

To acclerate the shift to a fast changing, digitally driven world, the focus was to build 'adapt-absorb-accelerate' people capabilities, with disruptive innovation and creative thinking, to create value for the organization.

Unlocking potential through training platforms, accelerated leadership development programmes, career progression modules, rewards and recognition programmes, communication and engagement initiatives fostering design thinking formed an integral part of building a robust, people resource, ready to Engineer the Future.


TPM Awards for Abrasive division - Hosur, Sriperumbudur, Maraimalai Nagar


*TPM - Champion of Champions Award*


*ECGC Award- Engineering- in the 'Diversified Product Category*

Continuing awards and recognition spanning divisions and functions, cascaded a winning culture across the Company, serving as a catalyst for Engineering the Future with excellence.


*TPM Award- IC, Hosur*


*Graduates of the CUMI Leadership Programme with Great Lakes Institute of Management Studies*

## Engineering the Future through a commitment to stakeholder and society...


*Practical sessions for CCSD students*


*Employee engagement initiatives - Volzhsky Abrasive Works, Russia*

CUMI's Corporate Social Responsibility initiatives are centred on providing need based support to the neighbouring communities in which it operates.

CUMI Centre for Skill Development (CCSD), a direct CSR initiative institutionalized by the Company trains youngsters from the less privileged background, providing them with employability skills. The Skill development centres both at Hosur and Edapally, offer students a comprehensive module, including skill based technical training with soft skills and personality development, thereby enhancing their employability potential.

The first two batches of trainees have graduated during the year, with many emerging as toppers in regional and national level skill competitions.

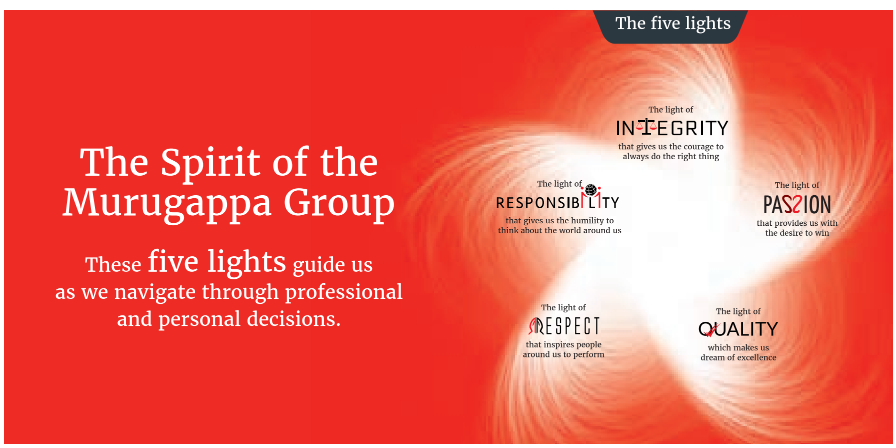
CUMI also contributes largely to the socio-welfare initiatives of the neighbouring communities across its various locations ranging from health camps, environmental and sustainability awareness sessions, women entrepreneur development programmes, through its various platforms such as Community Development Centre, CUMI - ASK Centre, CUMI Community Outreach Services, etc.

As a committed, environment friendly organisation, CUMI's Plants across the country adhere to the highest standards in Environment Management and have been accredited with ISO 14001 certificate. The Company supports green cover development, with tree planting drives and sustainable practices across locations.

CUMI's Plants are also BS-OHSAS 18001-2007 certified for occupational health and safety management systems, reinforcing its commitment for providing and maintaining a safe and hygiene working environment.

*Edappally Plant*

CUMI's high standards of Governance in all its activities driven by the Five Lights - Spirit of the Murugappa Group, has been duly recognised with the conferment of the Golden Peacock award for Corporate Governance, during the year.



# CHAIRMAN'S MESSAGE

**The world around us is dynamically changing providing us ample opportunities to create technological solutions for the future and progress collectively in "Making Materials Matter."**

Dear Shareholders,

The year 2017-18 turned out to be a very good year for CUMI with revenue growth resuming double digit levels driven by better performance across all major segments. The global economy grew with a broad based momentum from continuing strong performance in the Euro region, Japan, China and the United States. With the world economy enjoying a synchronised recovery, the emerging and developing economies also grew at a notable pace. The growth in advanced economies is forecasted to continue in the near term and the growth in emerging market and developing economies is expected to rise as well. Indian economic growth is also projected to increase lifted by strong private consumption as well as the diminishing transitory effects of the changes in its tax regime.

CUMI, its subsidiaries and joint venture companies had a good year with consolidated revenues (after normalising for excise duty) increasing by twelve per cent over the previous year. The recommissioning of the relocated plants from overseas across various locations into India were completed successfully, ably aiding the growth in overall operations. With a firm focus on delivering operational efficiencies through Total Productive Maintenance (TPM) practices across all plants, not only did the production efficiency improve but also it enhanced the overall profitability duly supported by prudent cost management efforts. It gives me immense pleasure to share with you that while the Industrial Ceramics and Bonded Abrasives plants of the Company at Hosur, Tamilnadu were awarded the JIPM excellence award in TPM after a very rigorous evaluation this year, the plants in Sriperumbudur and Maraimalai Nagar, recipients of the excellence awards in the year 2014-15 were conferred consistent TPM commitment awards in due recognition of their sustainable practices. The capital expenditure programmes which were predominantly for relocation and maintenance were well executed. Prudent working capital management continued to keep the Company debt free and capital expenditure was met from internal accruals.

## Abrasives

Abrasives, CUMI's largest business segment recorded a nine per cent growth during the year riding on macro-economic factors like infrastructure development as well as its strengths of new products and expanding dealer & distribution network. Though the year commenced on a challenging note with the implementation of the Goods and Service Taxes creating some uncertainty in the distribution network, the business improved subsequently. The business maintained its competitive edge by increasing indigenous sourcing of input materials and bringing in better efficiencies through TPM practices across plants. With the Russian subsidiary, Volzskhy Abrasive Works introducing newer products and exploring newer territories, the Abrasives sales in Russia was also higher this year. Sterling Abrasives, the Indian subsidiary manufacturing specialist conventional Abrasives performed well. Wendt India, the joint venture company which addresses the Super Abrasives, Grinding machines & Precision components market also delivered better performance in terms of revenue and recorded a significant increase in its profitability due to changes in product mix. Performance of CUMI Abrasives and Ceramics Company, China which is now operating on a new business model post discontinuance of in-house manufacturing operations last year, stabilised during the year with its operational loss coming down significantly.

### Ceramics

The Ceramics business did well during the year with the consolidated sales being eleven per cent higher than the previous year. The Metallized Cylinder Plant set up last year with equipment from NTK, Japan commenced production during the year and is expected to rapidly scale up. With continuing marketing efforts targeting newer markets and partnering with global customers, the Engineered Ceramics and Wear Ceramics segments also did very well. In-house raw materials used in the production of Engineering Ceramics and Metallized Ceramics gives this business division a competitive edge over the market. The Lined Equipment business at CUMI Australia continued to do well and CUMI America on the back of the benefits accruing from initiatives driven over the last few years has minimised its losses thus improving the consolidated performance. With investments in new technology for enhancing its product range for various user industries, in particular, Iron & Steel, the Refractories business is poised to grow well. The performance of the Company’s joint venture Murugappa Morgan Thermal Ceramics engaged in manufacture of Ceramic Fibre products remained flat owing to subdued market conditions.

### Electrominerals

The Electrominerals business of CUMI which did not do very well last year rebounded well with an eighteen per cent growth in revenues. The new regulations in China benefited this segment thus increasing volumes both in domestic and international markets across product lines. Despite an increase in overall profitability, the business continues to be impacted by increasing input costs, mainly power resulting from continuing lower rainfall in Maniyar, India which houses the division’s hydel power plant as well as increase in mineral prices globally. Volzhsky Abrasives, Russia ran at near full capacity and though the volumes were higher than last year, the maintenance issues in the external power grid leading to power outages impacted performance. The lower sales of Fused Zirconia in South Africa and high input cost adversely impacted the consolidated sales which however was still higher than the previous year.

Southern Energy Development Corporation Limited, the gas based power generation subsidiary recorded good revenues though marginally less than the previous year consequent upon reduction in gas supply as compared to the previous year. It recorded a growth of over twenty one percent in profitability. Net Access, the subsidiary providing IT facilities management and allied services recorded a marginal growth in turnover and profitability in the midst of competitive market conditions and certain strategic projects not taking off as envisaged.

After due consideration of the performance for the year, future projects and the cash flow position of the Company, the Board has considered an enhanced dividend of ₹2.25 per share for the year (29% more than the previous year) of which ₹1.00 per share has already been paid as interim dividend during the year.

Being a materials science technology oriented organisation, research and development plays a crucial role in CUMI’s growth trajectory and is a significant driving force. During the year, the number of research centres recognised by the Department of Scientific and Industrial Research, Government of India increased from six to seven, each serving as Centers of Excellence, fueling the technology initiatives across the organisation. Over 45 IPRs were created across various divisions during the year. Dedicated knowledge sharing sessions and training sessions were organised across the Company to reinforce the commitment to be technologically progressive. An IPR manual was prepared and this serves as a ready reckoner to employees who are constantly seeking to innovate, for protection of their ideas. Across CUMI operations, many technologists and scientists are working within and across divisions in a collaborative manner to enhance capabilities in the technologically advancing external environment.

The year 2017-18 continued to be a year of accolades and recognitions for CUMI. Besides being the recipient of the coveted TPM excellence awards across various business divisions, CUMI also received the prestigious Golden Peacock award in the engineering sector for Corporate Governance in due recognition of its governance practices. The Electrominerals division was conferred the HR excellence by the Confederation of Indian Industry (CII).

The CUMI Centre for Skill development (CCSD), the CSR initiative of CUMI addressing the training and development requirements of rural and underprivileged youth and honing their skills for future employment continued to function well. The year witnessed the graduation of the first and second batch of students who not only passed with flying colours but went on to be adjudged as winners in various regional and national level skill competitions.

Safety at the workplace continues to be top priority and receives highest attention from the Board. Besides periodic training and awareness sessions, dedicated safety training workshops were held for identification and elimination of unsafe working conditions. The Safety, Health and Environment risks are periodically monitored and the mitigation measures are reviewed considering its paramount significance on the operations.

While supporting the businesses in fulfilling their strategic intent and directions, the various teams at corporate office have been very agile in adapting to the dynamic regulatory scenario not only ensuring compliance but also in quickly aligning the processes and procedures to the revised regulatory norms.

The CUMI team across the world, under the able leadership of Mr. K Srinivasan, Managing Director and leaders across geographies pursues the core objective of engineering the future with excellence. During my interaction with them during visits, I'm most touched by their commitment and passion. It is indeed very gratifying to see them develop capabilities with conviction and confidence to address the future opportunities. Mr. R Rajagopalan after having served the Company for over 38 years retired as the Business Head of the Refractories division. We wish him well in his retirement. We welcome Mr. V G Rajendran who has taken over the helm of affairs of this division from Mr. Rajagopalan. I also wish to acknowledge Mr. Sridharan Rangarajan's valuable contribution to the Company during his term as Chief Financial Officer (CFO) since 2011 before moving to the Group in January 2018, as its CFO.

CUMI's Board of Directors continue to be a source of great inspiration and wise counsel to me. Their exercise of sound judgement while advising the team and me personally on the business as well as challenging us to greater levels of achievement is most commendable and Iàm thankful to them for being generous with their time and wisdom.

I take this opportunity to pay homage to Late Mr. M V Murugappan, former Chairman of the Company who passed away on 19th September, 2017 at the age of 81. Mr. M V Murugappan had been longest serving Managing Director of the Company from 1979 to 2000 before he took over the Chairmanship. Under his leadership, CUMI not only grew as India's leading manufacturer of Abrasives but his vision for technological leadership in the domain of materials led to several expansions including setting up of Industrial Ceramics division as well as investments in backward integration projects in hydro-electric and thermal energy, projects which were far ahead of times and continuing to give us a competitive edge even today.

The world around us is dynamically changing providing us ample opportunities to create technological solutions for the future and progress collectively in "Making Materials Matter." Towards this, the encouragement and unstinted support we receive from each of our stakeholders be it customers, suppliers, vendors, bankers and of course you shareholders is indeed wonderful for which my colleagues and I are most grateful.

With warm regards,

**M M Murugappan**

In loving memory of

**Shri M V Murugappan**

1936 - 2017

The passing away of Shri M V Murugappan, our former Chairman on 19th September, 2017, ends an important era in CUMI's history. A gentleman, visionary and a person far ahead of times, he Engineered the Future of CUMI, as its longest serving Managing Director, introducing breakthrough technologies and emerging business streams that have proven to be a competitive edge for the Company today.

A humble and gentle humanist, a passionate environmentalist, a champion of various social causes, he commanded deep respect not only from the industry but also from the scientific community and academic institutions, for his wisdom, nobility and futuristic thinking.

*"Sir, as you move from finite to infinite, your unseen hand on our shoulder will ever so gently guide us in all that we do."*

# BOARD OF DIRECTORS

## Engineering the Future through vision driven leadership…

Board of Directors during their visit to the Edappally Plant
(Standing L-R) K Srinivasan, P S Raghavan, Bharati Rao, M M Murugappan, Sujjain S Talwar, T L Palani Kumar, Aroon Raman, M A M Arunachalam, Sanjay Jayavarthanavelu

### M M Murugappan, 62 years

Mr. Murugappan holds a Masters degree in Chemical Engineering from the University of Michigan, USA. Besides serving as the Chairman of Coromandel International Limited, Tube Investments of India Limited, Wendt (India) Limited and TI Financial Holdings Limited, he is on the Boards of several companies including Mahindra & Mahindra, IIT Madras Research Park and Cyient. He was elected as a fellow of the Indian Ceramic Society and is also a member of the American Institute of Chemical Engineers, Indian Institute of Chemical Engineers, Plastics & Rubber Institute. He is also a member of the Board of Governors, IIT Madras and is the Executive Chairman of the Murugappa Corporate Advisory Board.

### T L Palani Kumar, 68 years

Mr. Palani Kumar is a Graduate in Chemical Engineering from the Indian Institute of Technology, Madras and a Post Graduate (Diploma) in Business Administration from the Indian Institute of Management, Ahmedabad. He has served as the Chief Executive Officer of Escorts Tractors Limited & New Holland Tractors Private Limited and as the Managing Director of Bharat Aluminium Company Limited. He is also on the Boards of Fostiima Integrated Learning Resources Private Limited and SBI Capital Markets Limited.

### Aroon Raman, 58 years

Mr. Aroon Raman holds a Master's degree in Economics from Jawaharlal Nehru University, New Delhi and a MBA from Wharton School, USA. He was the Managing Director of Raman Boards and then Raman Fibre Science Private Limited. He has served as Chairman of Confederation of Indian Industry, Karnataka. Besides being the Managing Director of Telos Investments & Technologies Private Limited he is also on the Boards of various companies including Wheels India, Brigade Enterprises, TVS Automobile Solutions and EduTech NTTF Private Limited.

### Sanjay Jayavarthanavelu, 49 years

Mr. Sanjay Jayavarthanavelu holds a Master's degree in Business Administration from Philadelphia University, USA. Currently, he is serving as the Chairman and Managing Director of Lakshmi Machine Works and as the Chairman of Super Sales, Lakshmi Life Sciences and Quattro Engineering India. He is also on the Boards of several companies viz., The Lakshmi Mills Company, Lakshmi Technology and Engineering Industries, etc.

### Bharati Rao, 69 years

Mrs. Bharati Rao holds a Masters degree in Economics and is a Certified Associate of the Indian Institute of Bankers. She brings in over three-decades of rich experience in Banking and Finance. Having joined State Bank of India in the year 1972, she rose to become its Deputy Managing Director, holding concurrent charge of few of its associate banks and non-banking subsidiaries besides being an Advisor for mergers and acquisitions. She is also on the Boards of Tata Teleservices, Cholamandalam Investment and Finance Company, SBI Capital Markets, Can Fin Homes, Wheels India Limited, etc.

### M A M Arunachalam, 50 years

Mr. M A M Arunachalam, also known as Arun Murugappan is an MBA graduate from the University of Chicago. He is the Managing Director of Parry Enterprises India Limited. A fourth generation member of the Murugappa family, he drives the business development and strategic initiatives for the Company by identifying opportunities for its divisions – General Marketing Division (GMD), Parry Travels and Tuflex India. He is also on the Board of Coromandel Engineering Company Limited.

### P S Raghavan, 62 years

Mr. Raghavan holds a Bachelor's degree in Physics from St. Stephen's College, Delhi as well as in Electronics & Communications Engineering from the Indian Institute of Science, Bangalore. Being in the Indian Foreign Service since 1979, he has held various diplomatic assignments in Moscow, Warsaw (Poland), London (UK), Ho Chi Minh City (Vietnam) and Pretoria (South Africa). He has been the Joint Secretary in the Prime Minister's Office dealing with Foreign Affairs, Nuclear Energy, Space, Defence and National Security; Secretary in the Ministry of External Affairs and the Indian Ambassador to countries like Russia, Ireland and Czech Republic etc. He is presently, the Convenor of National Security Advisory Board of India of the National Security Council Secretariat of the Government of India.

### Sujjain S Talwar, 54 years

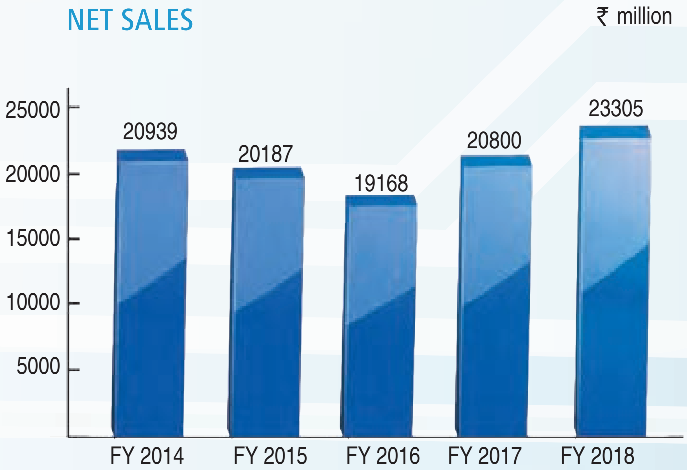
Mr. Sujjain Talwar is a qualified solicitor in India and England & Wales with over 25 years of experience. He is the founding partner of Economics Law Practice, a law firm that has consistently been ranked as a top 10 law firm, with over 150 lawyers and offices in 6 cities. He has in the past worked with reputed law firms such as Crawford Bayley, Pinsent Masons etc. He has been named as a leading individual for his 'depth of knowledge' 'innovative approach' and 'timely deliverables' by the Legal 500.

### K Srinivasan, 60 years

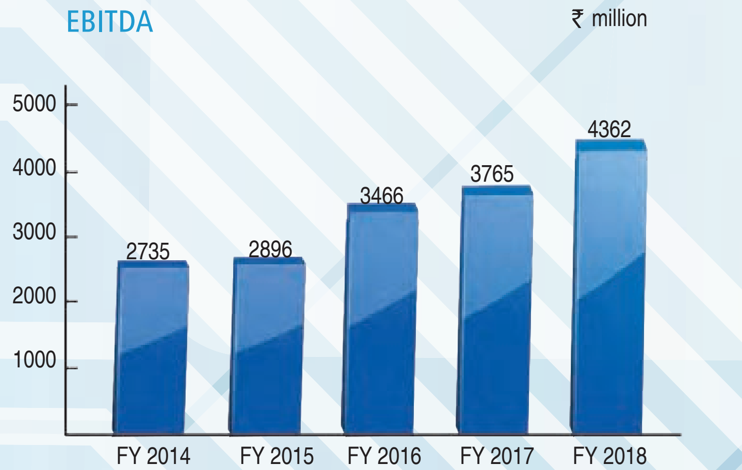
Mr. Srinivasan is a Graduate in Mechanical Engineering from REC, Surathkal, Karnataka. He earlier worked with Widia India, Philips India and Wendt India Limited. He has been associated with the Company since 1999 and was part of the team that set up the first overseas operations in Australia. He has been serving as a Board Member of the Company since 2005 and is currently the Chairman of Murugappa Morgan Thermal Ceramics Limited. He is on the Boards of Wendt India, Sterling Abrasives and Volzhsky Abrasive Works etc.

# FINANCIAL HIGHLIGHTS

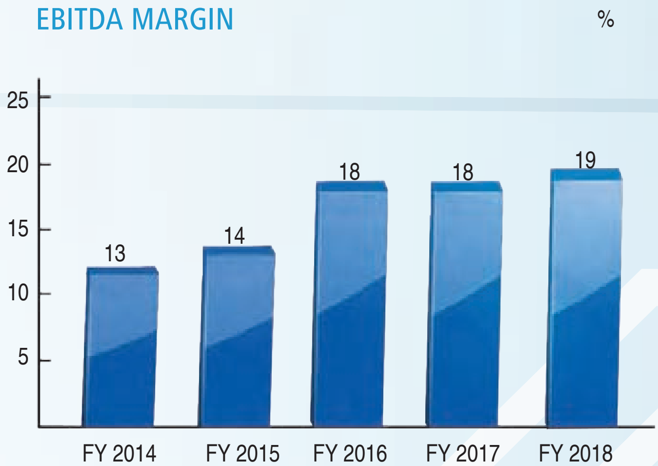
## NET SALES



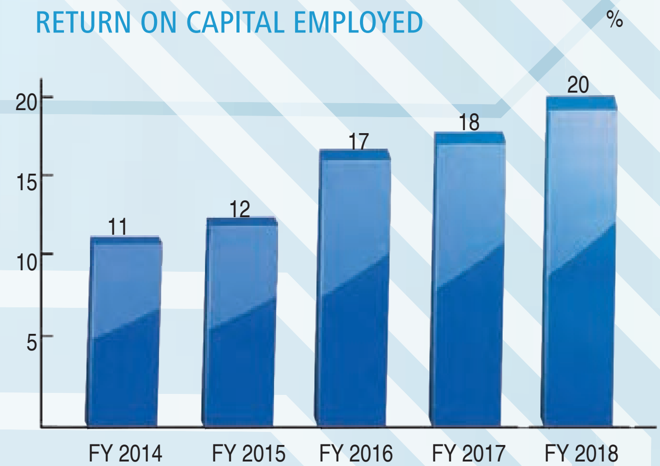

## EBITDA



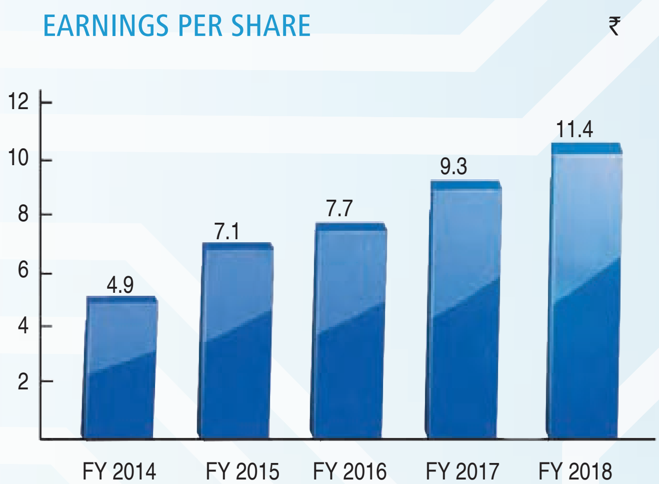

## EBITDA MARGIN



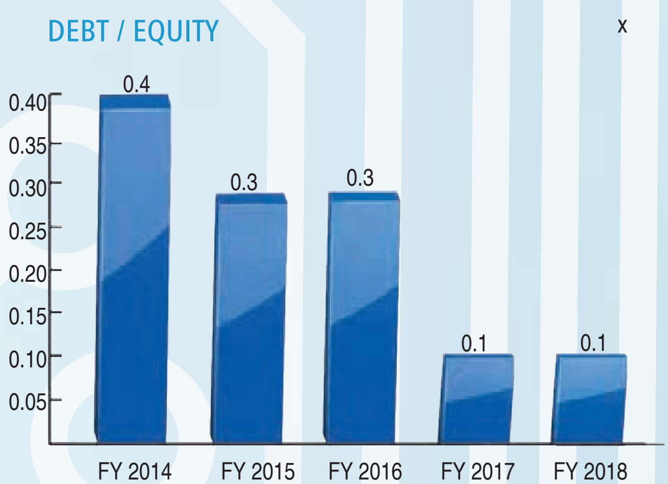

## RETURN ON CAPITAL EMPLOYED




## EARNINGS PER SHARE




## DEBT / EQUITY



# Financial Highlights

₹ million

| Summary information | Consolidated performance | | | | | Standalone performance | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 2018# | 2017# | 2016# | 2015 | 2014 | 2018# | 2017# | 2016# | 2015 | 2014 |
| Net Sales | 23305 | 20800 | 19168 | 20187 | 20939 | 15514 | 13828 | 12735 | 11518 | 11276 |
| EBITDA * | 4362 | 3765 | 3466 | 2896 | 2735 | 2805 | 2464 | 2385 | 1800 | 1645 |
| PBIT * | 3302 | 2800 | 2598 | 1892 | 1825 | 2067 | 1795 | 1764 | 1212 | 1154 |
| PBT | 3216 | 2619 | 2369 | 2204 | 1543 | 2052 | 1707 | 1675 | 1994 | 1024 |
| PAT | 2156 | 1749 | 1441 | 1326 | 915 | 1435 | 1218 | 1164 | 1483 | 728 |
| Net Fixed Assets | 6508 | 6626 | 6222 | 7204 | 8260 | 4474 | 4595 | 4435 | 4070 | 4283 |
| Net Working Capital | 7366 | 5578 | 4143 | 3790 | 4491 | 4709 | 3487 | 2888 | 2939 | 2593 |
| Non Current Investments | 1232 | 1195 | 1293 | 78 | 81 | 2569 | 2541 | 2561 | 2375 | 1306 |
| Shareholders Networth | 15643 | 13828 | 11923 | 10887 | 11060 | 11697 | 10550 | 9584 | 8599 | 7336 |
| Loan Funds | 1294 | 1559 | 3199 | 3402 | 4563 | 18 | 26 | 1091 | 835 | 1188 |
| **Ratio Analysis** | | | | | | | | | | |
| **Performance Ratios** | | | | | | | | | | |
| EBITDA / Net Sales % | 19% | 18% | 18% | 14% | 13% | 18% | 18% | 19% | 16% | 15% |
| PBIT / Net Sales % | 14% | 13% | 14% | 9% | 9% | 13% | 13% | 14% | 11% | 10% |
| Asset Turnover times | 1.3 | 1.2 | 1.1 | 1.1 | 1.1 | 1.4 | 1.3 | 1.3 | 1.3 | 1.2 |
| Return on Capital Employed % | 20% | 18% | 17% | 12% | 11% | 19% | 17% | 17% | 13% | 14% |
| Return on Equity | 15% | 14% | 13% | 12% | 8% | 13% | 12% | 13% | 19% | 10% |
| International Revenue (net) share % | 45% | 45% | 44% | 46% | 50% | 23% | 23% | 21% | 20% | 19% |
| **Leverage Ratios** | | | | | | | | | | |
| Interest Cover times | 50.7 | 20.8 | 15.1 | 11.4 | 9.7 | 191.2 | 28.1 | 26.8 | 20.7 | 12.7 |
| Debt Equity Ratio | 0.1 | 0.1 | 0.3 | 0.3 | 0.4 | 0.0 | 0.0 | 0.1 | 0.1 | 0.2 |
| Debt / Total Assets | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 |
| **Liquidity Ratio** | | | | | | | | | | |
| Current Ratio | 2.8 | 2.4 | 1.8 | 1.7 | 1.8 | 3.0 | 2.7 | 2.2 | 2.6 | 2.2 |
| **Activity Ratio** | | | | | | | | | | |
| Inventory Turnover days | 65 | 66 | 71 | 74 | 73 | 57 | 60 | 62 | 63 | 59 |
| Receivable Turnover days | 67 | 66 | 68 | 71 | 68 | 69 | 67 | 68 | 71 | 69 |
| Creditors No. of days | 38 | 38 | 41 | 49 | 46 | 50 | 47 | 43 | 43 | 43 |
| Cash Cycle days | 94 | 94 | 98 | 96 | 95 | 76 | 80 | 87 | 91 | 85 |
| **Investor related Ratios** | | | | | | | | | | |
| Earning Per Share (₹) | 11.4 | 9.3 | 7.7 | 7.1 | 4.9 | 7.6 | 6.5 | 6.2 | 7.9 | 3.9 |
| Dividend Per Share (₹) | NA | NA | NA | NA | NA | 2.25 | 1.75 | 1.50 | 1.25 | 1.25 |
| - Interim | NA | NA | NA | NA | NA | 1.00 | 1.00 | 1.50 | 0.75 | 0.75 |
| - Final (proposed and paid in subsequent year) | NA | NA | NA | NA | NA | 1.25 | 0.75 | - | 0.50 | 0.50 |
| Dividend Payout % | NA | NA | NA | NA | NA | 33.5% | 29.6% | 26.0% | 16.0% | 36.6% |
| Price to Earnings Ratio | 30.2 | 27.0 | 22.8 | 25.4 | 25.3 | | | | | |
| Enterprise Value / EBITDA | 14.9 | 12.8 | 10.3 | 12.6 | 10.0 | NA | NA | NA | NA | NA |
| Enterprise Value / Net Sales | 2.8 | 2.3 | 1.9 | 1.8 | 1.3 | NA | NA | NA | NA | NA |

* excluding exceptional income/expenses (Net)

# The figures mentioned herein above for the years ended 31st March 2018, 31st March 2017 and 31st March 2016 are based on Indian Accounting Standards (Ind AS), hence not comparable with previous year figures prepared under previous GAAP.

# Glossary

| | | |
|---|---|---|
| **A** | **Performance Ratios** | |
| | EBITDA/Net Sales % | EBITDA = PBT + Interest + Depreciation - Exceptional items<br>Net Sales = Gross Sales - Excise duty on Sales |
| | PBIT/Net Sales % | PBT + Interest - Exceptional items |
| | Asset Turnover times (excluding Investments) | Net sales/ Average of Total assets excluding Investments |
| | Return on Capital Employed % | PBIT/Average Capital Employed |
| | Return on Equity | PAT/Average of Shareholder's Funds |
| **B** | **Leverage Ratios** | |
| | Interest Cover times | EBITDA/Interest cost |
| | Debt Equity Ratio | Total Debt/Shareholders Funds |
| | Debt/Total Assets | Total Debt/Total Assets |
| **C** | **Liquidity Ratio** | |
| | Current Ratio | Current Assets/Current Liabilities |
| **D** | **Activity Ratio *** | |
| | Inventory Turnover days | Average Inventory / (Turnover/365) |
| | Receivable Turnover days | Average Receivables / (Turnover/365) |
| | Creditors No of days | Average Trade Creditors / (Turnover/365) |
| | Cash Cycle days | Inventory Turnover + Receivables Turnover - Creditors No of days |
| | * - based on Turnover and average of opening/closing parameters | |
| **E** | **Investor related Ratios** | |
| | Price to Earnings Ratio | Average share of monthly high low/EPS |
| | Enterprise Value/EBITDA | Total Enterprise Value^/EBITDA |
| | Enterprise Value/Net Sales | Total Enterprise Value^/Net Sales |
| | ^ Enterprise Value | Market Capitalisation + Loan funds + Non controlling interest - Cash & Cash equivalents |

# CORPORATE INFORMATION

## BOARD AND COMMITTEES

### The Board of Directors

M M Murugappan, Chairman (DIN 00170478)
T L Palani Kumar (DIN 00177014)
Sanjay Jayavarthanavelu (DIN 00004505)
Aroon Raman (DIN 00201205)
Bharati Rao (DIN 01892516)
M A M Arunachalam (DIN 00202958)
P S Raghavan (DIN 07812320)
Sujjain S Talwar (DIN 01756539)
K Srinivasan, Managing Director (DIN 00088424)

### Committees of the Board

**Audit Committee**
T L Palani Kumar, Chairman
Sanjay Jayavarthanavelu
Bharati Rao
Sujjain S Talwar

**Nomination and Remuneration Committee**
T L Palani Kumar, Chairman
Aroon Raman
Sanjay Jayavarthanavelu

**Corporate Social Responsibility Committee**
Aroon Raman, Chairman
P S Raghavan
K Srinivasan

**Risk Management Committee**
P S Raghavan, Chairman
Aroon Raman
K Srinivasan

**Stakeholders Relationship Committee**
M M Murugappan, Chairman
M A M Arunachalam
K Srinivasan

## MANAGEMENT COMMITTEE

K Srinivasan, Managing Director
N Ananthaseshan, President - Abrasives
Rajesh Khanna, President - Ceramics
P S Jayan, Executive Vice President - Electrominerals
M Muthiah, Executive Vice President - Human Resources

## COMPANY SECRETARY

Rekha Surendhiran
Carborundum Universal Limited
Parry House, 43, Moore Street,
Chennai 600 001
Tel: +91-44-30006141; Fax: +91-44-30006149
E-mail: rekhas@cumi.murugappa.com

## STATUTORY AUDITORS

Price Waterhouse Chartered Accountants LLP

## BANKERS

State Bank of India
Standard Chartered Bank
Bank of America
The Hongkong and Shanghai Banking Corporation Ltd.
BNP Paribas

## REGISTRAR AND SHARE TRANSFER AGENT

Karvy Computershare Private Limited
Unit: Carborundum Universal Limited
Karvy Selenium Tower B, Plot 31-32, Gachibowli,
Financial District, Nanakramguda, Hyderabad - 500 032.
Tel: +91-40-67162222, Fax: +91-40-23420814
Toll Free no.: 1800-345-4001
E-mail: einward.ris@karvy.com; website: www.karvy.com
Contact Person: Mrs. Varalakshmi P - Asst. General Manager

# Directors' Report

Your Directors have the pleasure in presenting the 64th Annual Report together with the Audited Financial Statements for the year ended 31st March 2018. The Management Discussion & Analysis Report which is required to be furnished as per SEBI (Listing Obligations and Disclosure Requirements) Regulations, 2015 (hereinafter referred to as the Listing Regulations) has been included in the Directors' Report so as to avoid duplication and overlap.

## ECONOMIC OVERVIEW & COMPANY PERFORMANCE

### Economic Overview

The global economic growth strengthened in 2017 led by investment recovery, rebound in manufacturing & trade and an upswing in commodity prices. The momentum was driven by continued strong growth in emerging Asia, resurgence in European economy, tax cuts in the United States and improved spending in advanced economies. Stock market boom, bitcoin bubble, higher trade indices, low fear factor, rising Eurozone GDP and protectionist measures by certain developed economies defined the year 2017.

As per International Monetary Fund, the global economy grew at 3.8 per cent. The growth was broad-based and almost 75 per cent of the countries registered a growth. Even more important was the fact that some of the countries that had high unemployment, such as many in the Euro area participated in the growth surge and experienced strong employment growth. Wage growth however remained tepid in advanced economies despite falling unemployment rates. A lower wage growth led to controlled inflation which had a positive impact on the financial markets.

Some of the larger emerging market economies, such as Argentina, Brazil and Russia came out of recession. China managed to maintain its rate of expansion, dispelling fears over a potential sharp slowdown as it continues to mature after decades of rapid growth. Metal and fuel prices were supported by stronger momentum in global demand as well as supply constraints in the energy sector, including hurricane-related stoppages in the United States, financial disruptions in Venezuela and security problems in the regions of Iraq. Equity valuations for major capital markets continued their ascent to register record highs as central banks maintained accommodative monetary policy amidst a moderate inflation. An improved economic outlook and an increased risk appetite boosted asset prices and suppressed volatility.

In India, the pace of key structural initiatives continued in 2017-18. The Real Estate (Regulation and Development) Act, 2016 provisions came into effect from 1st May 2017. The Goods and Services Tax (GST) regime came into effect from 1st July 2017. As per Asian Development Bank, India's GDP growth in FY 2017 was at 6.6% compared to 7.1% in FY 2016. The reduction in growth was driven by lingering effects of demonetisation which impacted the informal sector in the first half of FY 2016-17 and the teething issues related to implementation of the GST which hampered operations of small and medium-sized enterprises and exporters for major part of the year. Despite these short-term costs, the benefits of reforms coupled with Government's steps to improve the ease of doing business and kick starting capital investments by way of infrastructure development projects are likely to bolster growth in the current year and future. The signs of pick up in the economy can be witnessed from the improvement in indicators of industrial production and automobile sales in later part of the year 2017. The biggest challenges for 2018 would be rising oil prices, increasing inflationary pressures, tighter financial conditions and higher fiscal deficit. The key to this conundrum lies in the revival of consumer demand and private investment.

### Company Performance

#### Revenues

During the year, the standalone business grew by 5 per cent and the consolidated revenues by 7 per cent driven by better performance of all the businesses. The growth is not comparable to previous year's growth since in the year 2016-17, excise duty was included in revenue for the full year, whereas for the FY 2017-18 excise duty is included only for the first quarter period. On a comparable basis without considering excise duty, standalone and consolidated sales both grew by 12 per cent.

The following table summarises the standalone and consolidated revenues - both segment and geography wise:

₹ million

| | 2017-18 | | 2016-17 | | Growth |
|---|---|---|---|---|---|
| | % share | Amount | % share | Amount | % |
| **Standalone** | | | | | |
| Abrasives | 55 | 8636 | 57 | 8592 | 1 |
| Ceramics | 26 | 4056 | 26 | 3899 | 4 |
| Electrominerals | 26 | 4107 | 23 | 3396 | 21 |
| Eliminations | (6) | (1025) | (6) | (918) | 12 |
| **Total** | **100** | **15774** | **100** | **14969** | **5** |
| India | 77 | 12201 | 79 | 11832 | 3 |
| Rest of the world | 23 | 3573 | 21 | 3136 | 14 |
| **Total** | **100** | **15774** | **100** | **14969** | **5** |
| **Consolidated** | | | | | |
| Abrasives | 44 | 10363 | 46 | 10163 | 2 |
| Ceramics | 21 | 5068 | 21 | 4724 | 7 |
| Electrominerals | 38 | 8887 | 35 | 7694 | 16 |
| Power | 1 | 239 | 1 | 265 | (10) |
| IT Services | 2 | 401 | 2 | 394 | 2 |
| Eliminations | (6) | (1379) | (6) | (1241) | 11 |
| **Total** | **100** | **23579** | **100** | **21999** | **7** |
| India | 55 | 13048 | 58 | 12669 | 3 |
| Rest of the world | 45 | 10531 | 42 | 9330 | 13 |
| **Total** | **100** | **23579** | **100** | **21999** | **7** |

Demand expansion from user industries, inflation of metal and commodity prices, introduction of new products and focus on newer markets resulted in a better top line growth.

The Company's consolidated revenues from India increased by 3 per cent and from rest of the world increased by 13 per cent. At a consolidated level, Abrasives sales grew by 2 per cent, Ceramics sales grew by 7 per cent and the Electrominerals segment grew by 16 per cent.

As detailed earlier, the growth over previous year is not comparable considering the change in inclusion of excise duty in revenues.

On a comparable basis, the Company's consolidated revenues from India increased by 11 per cent and from rest of the world increased by 13 per cent. At a consolidated level, Abrasives sales grew by 9 per cent, Ceramics sales grew by 11 per cent and the Electrominerals segment grew by 18 per cent.

## Manufacturing

The manufacturing team played a key role, helping the Company in the growth momentum through effective production planning and order execution. The plants in India operated at about 70 per cent capacity utilisation levels. Some product segments like Coated Abrasives continued to run at near full capacity. Continuing implementation of Total Productive Maintenance (TPM) at shop floors lead to improvement in efficiency of machines and the entire production process. Two plants of the Company at Hosur were awarded TPM excellence award and the Plants at Sriperumbudur and Maraimalai Nagar were conferred the higher level TPM consistency Award by Japan Institute of Plant Maintenance (JIPM).

Capital expenditure during the year across all geographies was majorly in the nature of quality enhancement, line balancing and general infrastructure.

## Earnings & Profitability

The Company's standalone financial results are summarised in the table below:

₹ million

| | As a % of Gross Sales | 2017-18 | As a % of Gross Sales | 2016-17 | Increase % |
|---|---|---|---|---|---|
| **Gross Sales** | | **15774** | | **14969** | |
| Other Operating Income | | 249 | | 229 | |
| **Revenue from Operations** | | **16023** | | **15198** | |
| Other Income | | 310 | | 343 | |
| **Total Income** | | **16333** | | **15541** | |
| **Expenses** | | | | | |
| Cost of material Consumed | 37 | 5796 | 34 | 5121 | 13 |
| Purchase of stock in trade | 4 | 709 | 5 | 818 | (13) |
| Movement of Inventory | 1 | 138 | 0 | 12 | 1050 |
| Excise Duty on sale of goods | 2 | 260 | 8 | 1141 | (77) |
| Employee benefits expense | 11 | 1742 | 10 | 1533 | 14 |
| Finance Cost | 0 | 15 | 1 | 88 | (83) |
| Depreciation and amortisation | 5 | 739 | 4 | 669 | 10 |
| Other expenses | 31 | 4882 | 30 | 4452 | 10 |
| **Total Expenses** | **91** | **14281** | **92** | **13834** | **3** |
| **Profit before tax** | **13** | **2052** | **11** | **1707** | **20** |
| **Profit after tax** | **9** | **1435** | **8** | **1218** | **18** |
| **Total Comprehensive Income** | **9** | **1465** | **8** | **1138** | **29** |

Aided by the growth in revenues, standalone profit before tax improved to ₹2052 million from ₹1707 million in the previous year.

The Company uses a variety of raw materials for its products - Bonds, Yarn, Grains, Calcined Alumina, Tabular Alumina, Mullite, Pet Coke, Bauxite, Zircon Sand amongst others. The sourcing is a prudent mix of indigenous and imported materials. Aided by judicious sourcing and optimising throughput in production, material consumption improved during the year.

Other expenses increased from ₹4452 million in preceding year to ₹4882 million in the current year. The increase reflects the volume growth, cost increases and investment in preparing the organisation for the expansion programmes being undertaken. Power and fuel cost also increased during the current year. Captive power generation from the Company's Hydel power unit in Maniyar continued to be lower this year due to inadequate rainfall. The power consumption was also higher in line with the higher volumes produced compared to the previous year. Employee benefits expense increased by 14 per cent during the year, which is a combination of both increase in head count and salary.

The overall employee cost was at 11 per cent of the revenues. The revenues of last year had excise duty for the entire year where as the revenues for this year had excise duty for the first three months on account of implementation of GST with effect from 1st July 2017. Hence the employee cost as a percentage of the revenues is not directly comparable.

Profit before interest and tax margin expanded at all the divisions owing to higher sales and better operating leverage.

Finance costs were at ₹15 million compared to ₹88 million in the previous year. Profit after tax of ₹1435 million was higher compared to that of the previous year ₹1218 million. Total Comprehensive Income increased from ₹1138 million to ₹1465 million.

The consolidated profit before tax (before share of profit from associates and joint ventures) entity-wise is represented below:

₹ million

| | 2017-18 | 2016-17 |
|---|---|---|
| **CUMI Standalone** | 2052 | 1707 |
| Subsidiaries including step down subsidiaries: | | |
| **Indian** | | |
| Net Access India Limited | 37 | 35 |
| Southern Energy Development Corporation Limited | 71 | 90 |
| Sterling Abrasives Limited | 134 | 101 |
| **Foreign** | | |
| CUMI (Australia) Pty Limited | 152 | 143 |
| CUMI International Limited | 284 | 240 |
| Volzhsky Abrasives Works | 1187 | 784 |
| Foskor Zirconia Pty Limited | (162) | (19) |
| CUMI America Inc. | (33) | (98) |
| CUMI Middle East FZE | 8 | 5 |
| CUMI Abrasives & Ceramics Company Limited | (9) | 1 |
| Thukela Refractories Isithebe Pty Limited | (0) | (2) |
| CUMI Europe s.r.o. | (8) | 1 |
| **Total of Subsidiaries** | **1661** | **1281** |
| Inter Company Eliminations | (643) | (560) |
| **Consolidated Profit before tax** | **3070** | **2428** |
| **Consolidated Profit after tax attributable to owners** | **2156** | **1749** |

On a consolidated basis, the profit before tax (before share of profit from associates and joint ventures) increased from ₹2428 million to ₹3070 million. Profit after tax and non-controlling interests was ₹2156 million (previous year ₹1749 million). The performance of the subsidiaries is detailed separately in this Report. Segmental profitability improved across all segments owing to higher volume, selective price increase mitigating the cost push and efficient cost management.

### Financial Position

An overview of the Company's financial position - on a Standalone and Consolidated basis is given below:

₹ million

| Financial position | Standalone | | | Consolidated | | |
|---|---|---|---|---|---|---|
| | 31.03.2018 | 31.03.2017 | % change | 31.03.2018 | 31.03.2017 | % change |
| Net Fixed assets (including goodwill) | 4474 | 4595 | (3) | 7659 | 7774 | (1) |
| Investments - Non current | 2569 | 2541 | 1 | 1232 | 1195 | 3 |
| **Other assets:** | | | | | | |
| - Inventories | 2604 | 2268 | 15 | 4380 | 3867 | 13 |
| - Trade receivables | 3267 | 2563 | 27 | 4751 | 3806 | 25 |
| - Cash and cash equivalents | 740 | 67 | 1004 | 1847 | 1298 | 42 |
| - Other assets | 705 | 939 | (25) | 1116 | 1282 | (13) |
| **Total assets** | **14359** | **12973** | **11** | **20985** | **19222** | **9** |
| Liabilities (Other than loans) | 2644 | 2397 | 10 | 3432 | 3178 | 8 |
| **Net assets** | **11715** | **10576** | **11** | **17553** | **16044** | **9** |
| **Sources of funding:** | | | | | | |
| Total equity attributable to owner | 11697 | 10550 | 11 | 15644 | 13828 | 13 |
| Non - Controlling interest | | | | 615 | 657 | (6) |
| **Loan outstanding:** | | | | | | |
| - Long term borrowings | 11 | 18 | (40) | 66 | 67 | (1) |
| - Payable within one year | 7 | 8 | (9) | 46 | 68 | (33) |
| - Short term borrowings | - | - | | 1182 | 1424 | (17) |
| **Total loans** | 18 | 26 | (31) | 1294 | 1559 | (17) |
| | **11715** | **10576** | **11** | **17553** | **16044** | **9** |
| **Loans (net of cash and cash equivalents)** | **(722)** | **(41)** | **1659** | **(553)** | **261** | **(311)** |

On a consolidated basis, the total equity attributable to owners as on 31st March 2018 was ₹15644 million. There was an increase (net of dividend) to the extent of ₹1816 million. Non-controlling interest was at ₹615 million.

Liabilities (other than loans) was ₹3432 million. The loan outstandings reduced from ₹1559 million to ₹1294 million. Net fixed assets (including goodwill) decreased from ₹7774 million in the last year to ₹7659 million during the current FY 2017-18.

### Cash Flow

The Company's cash flow generation is healthy. The following table summarises the Company's consolidated and standalone cash flows for the current and previous years:

₹ million

| Cash flow | Standalone | | Consolidated | |
|---|---|---|---|---|
| | 2017-18 | 2016-17 | 2017-18 | 2016-17 |
| Cash flow from Operations | 2001 | 2284 | 3238 | 3741 |
| Taxes paid | (685) | (515) | (1109) | (788) |
| **Cash flow from operating activities** | **1316** | **1769** | **2129** | **2953** |
| Capital Expenditure (Net of disposal) | (577) | (750) | (920) | (1061) |
| Cash flow from other investing activities | 290 | 293 | 172 | 248 |
| **Cash flow from investing activities** | **(287)** | **(457)** | **(748)** | **(813)** |
| **Cash flow from financing activities** | **(356)** | **(1329)** | **(832)** | **(2071)** |
| Net Increase/(Decrease) in Cash & Cash equivalents | 673 | (17) | 549 | 69 |
| **Net Cash and Cash equivalents at the beginning of the year** | **67** | **84** | **1298** | **1136** |
| Effect of exchange rate changes on the balances of cash and cash equivalents held in foreign currencies | - | - | 0 | 93 |
| **Cash and Cash equivalents at the end of the year** | **740** | **67** | **1847** | **1298** |

On a standalone basis, net cash generation from operations was ₹1316 million in FY 2017-18 compared to previous year's ₹1769 million.

Net cash outflow on account of investing activities was ₹287 million majorly towards addition of property, plant and equipment. Net cash outflow on account of financing activities was ₹356 million which is attributable primarily to repayment of borrowings and dividends paid. The net increase in cash and cash equivalents was ₹673 million against a decrease of ₹17 million in FY 2016-17.

On a consolidated basis, net cash generation from operations was ₹2129 million in FY 2017-18. Net cash outflow on account of investing activities was ₹748 million. Net cash outflow on account of financing activities was ₹832 million which is attributable primarily to repayment of borrowings and dividends paid. The net increase in cash and cash equivalents was ₹549 million against an increase of ₹69 million in FY 2016-17.

## SHARE CAPITAL

The paid up equity share capital as on 31st March 2018 was ₹188.96 million. The capital increased during the year by ₹0.30 million, consequent to allotment of shares upon exercise of Stock Options by employees under the Company's Employee Stock Option Scheme, 2007 and Employee Stock Option Plan 2016.

## DIVIDEND

Considering the past dividend payout ratio and the current year's operating profit, the Board has considered it appropriate to recommend a final dividend of ₹1.25/-per equity share of ₹1/- each. It may be recalled that in February 2018, an interim dividend at the rate of ₹1/- per equity share of ₹1/- each was declared and paid. This aggregates to a total dividend of ₹2.25/- per equity share of ₹1/- each for the year, which is higher than the previous year. The Company's Dividend Policy is available at *https://www.cumi-murugappa.com/policies.html.* The dividend paid as well as being recommended for the year ended 31st March 2018 is in line with this policy.

## TRANSFER TO RESERVES

An amount of ₹500 million has been transferred to the General Reserve of the Company as at 31st March 2018.

## PERFORMANCE OF BUSINESS SEGMENTS

The business profile, market developments and current year performance are elaborated in the following sections:

### Abrasives

#### Business Profile

The business is into manufacture and sales of Abrasives. The key product segments are Bonded Abrasives, Coated Abrasives, Super Abrasives and allied products.

An Abrasive is a substance which grinds, cleans, scours, abrades or removes solid material by rubbing action or by impact. Abrasives are mineral like materials available in different shapes, sizes and types according to need. Abrasive materials and Abrasive products are utilised in several end user industries such as manufacture of Machinery, Electrical & Electronic equipment, Transportation and Metal fabrication among others.

The division has more than sixty years of experience in Abrasives manufacturing. The techno-commercial knowledge of the team and their wealth of experience has been the strength of the division in manufacturing world class products.

In order to match all international standards and to compete globally, the division sources its raw materials both from the Electrominerals division and from best suppliers across the world. These cost-effective manufacturing techniques and quality control systems form the core of the division's objectives - best products and customer satisfaction at affordable prices.

The business is driven by a combination of manufacturing and marketing entities. There are ten manufacturing plants located in India, Russia and Thailand. The marketing entities in North America, Middle East, China and distributors across the globe enables the divisions to reach across geographies.

The Company caters to customers located around 55 plus countries through its network of manufacturing facilities and marketing establishments.

### Industry Scenario

The global Abrasives market is segmented based on region. Asia Pacific represents the largest and the fastest growing market for the Abrasives industry and China is the largest producer of Abrasive materials and Abrasive products. The growing demand for various types of Abrasives from Transportation, Building & Construction and other durable goods industries is expected to drive the Asia Pacific Abrasives market. Growth in the United States - which holds the world's second largest national market for Abrasives, is expected to deliver good growth. The market is dominated by leading players operating across the globe.

In India, the Abrasives industry is catered to few leading players serving major portion of the Indian market. Imports are predominantly in the high and low end Abrasives. The Bonded Abrasives and the Coated Abrasives are important segments in the Indian scenario and contribute maximum in terms of revenues to this industry. The unorganised market is to the extent of thirty per cent of overall market. The implementation of Goods and Services Tax brought about an uniform regime for all players to compete in the market evenly. In the domestic Russian market, there are three major players. The Company is one of the major players in Vitrified Bonded Abrasives.

### Sales Overview

The focus for the Abrasives business was to grow topline at better than the market growth rate with significantly better profitability. Accordingly, the Abrasives business on a standalone basis recorded a growth in revenues (without excise duty) from ₹7866 million to ₹8470 million with improvement in margins.

The year started with the announcement of the implementation of Goods and Service Tax. The business faced a challenging first quarter owing to significant reduction in order incoming from dealers consequent to migration to the new tax regime. The business subsequently improved. Restocking resumed and in the subsequent quarters, the order book improved significantly.

The Coated business continued to register good growth in the conventional products in domestic market. The growth came about by way of launch of new products, focus on technical products, strong brand recall and dealers' readiness to invest in this product segment as well as quality consistency of the products. Coated Abrasives division is now at a stage where the market is growing and the demand for its products are good. These are largely driven by the consistent quality and availability. Both these attributes are direct outcomes of the TPM processes implemented and practised in the facilities at Maraimalai Nagar and Sriperumbudur which received the prestigious JIPM award for TPM consistency this year. The business during the year launched breakthrough products in this category. With the capacity running full, this would be expanded in the coming years.

Distribution leadership has been one of the strategic pillars for the Company's growth and the business has been making steady progress on this front. During the year, the business aggressively appointed new channel partners and expanded its dealer network both in India and abroad. Retail development and industrial storming initiatives were conducted for better market penetration. Introduction of newer industrial products were pursued during the year which were sold through industrial distribution chain.

The Abrasives sales in Russia was higher this year owing to introduction of new products and targeting newer territories. Sterling Abrasives which addresses the agriculture related applications delivered a good growth during the year.

### Manufacturing

Manufacturing supported the marketing initiatives well in terms of timely delivery, product performance and consistency.

The key strategy over the years has been to increase the indigenous sourcing and lowering the gap between exports and imports to ensure sustainable profitability in the Abrasives business. Business continued to focus on pursuing dual strategy - firstly, of moving from traditional Brown to Semi-friables to gain significant competitive advantage; secondly, of offering superior Coated technical products with high performance Zirconia and Ceramic grains.

In order to cater to increased demand for Coated products, the division pursued contract manufacturing and as detailed above, the capacity would be augmented during this year.

The Company has adopted TPM not only as a tool but also as its strategic initiative and this has given it a competitive edge today. TPM is an organisation-wide strategy to increase the effectiveness of production environment, especially through methods of increasing the effectiveness of equipment. The TPM journey, which started in 2011 marked the beginning of an era of change. The Bonded Abrasives Plant in Hosur was conferred the JIPM award for TPM excellence in Category A this year.

In the mass market Thin wheel product category, the business has reorganised the production capacities across various plants to optimise production capacity, capability and market proximity. The Non-standard business was engaged in productivity improvement for customers with continued slew of new product launches.

The division worked on various research and development opportunities in the field of precision grinding, 3D printing, light metal grinding etc.

Considering the changing landscape of manufacturing technologies, the division would continue in its effort to build capabilities in newer fields and technologies.

CUMI Abrasives and Ceramics Company, China, which is now operational on a trading model has stabilised with the new business model.

Aided by buoyancy in revenues, cost reduction projects and others initiatives, the Abrasives business recorded an increase in standalone operating profits before interest and taxes at ₹1225 million from ₹1047 million last year. At a consolidated level, the profits grew from ₹1133 million last year to ₹1325 million this year.

### Key Financial Summary

₹ million

| Particulars | Standalone | | | Consolidated | | |
|---|---|---|---|---|---|---|
| | 2017-18 | 2016-17 | Change (%) | 2017-18 | 2016-17 | Change (%) |
| Revenue (excluding excise duty) | 8470 | 7866 | 8 | 10184 | 9379 | 9 |
| Segment results (PBIT) | 1225 | 1047 | 17 | 1325 | 1133 | 17 |
| Capital employed | 3354 | 3122 | 7 | 5025 | 4629 | 9 |
| Share to total revenue of CUMI (%) (without eliminations) | 55 | 57 | | 44 | 45 | |
| Share to segment results (PBIT) of CUMI (%) | 59 | 58 | | 42 | 43 | |

## Ceramics

### Business Profile

The Ceramics business has three product groups viz., Industrial Ceramics, Super Refractories and Anti-corrosives.

Industrial Ceramics business offers Alumina and Zirconia products of technical ceramic grades addressing Wear protection, Electrical insulation, Thermal protection and Ballistic protection applications. The Super Refractories product group supplies Fired, Monolithic, Flow control products, POW Wellfiler and fibre as also Refractory design and installation services addressing the insulation and thermal resistance requirements of industries. The Refractory fibre, Refractory design and installation businesses are addressed through our joint ventures Murugappa Morgan Thermal Ceramics Limited and Ciria India Limited. The Anti-corrosives product group offers Acid resistant bricks, Polymer concrete cells and various other products addressing the anti-corrosion requirements of industries.

The key user industries for Ceramics business are Power Generation and Transmission, Coal washeries, Grain handling, Sanitary tiles and Sanitary ware, Ballistic protection, Cement, Non-ferrous metals, Iron and Steel industries, Carbon black, Insulators, Furnace building, Glass, Petrochemicals and Construction.

The operations are carried out through ten manufacturing/service facilities located in India, Australia and Russia. The subsidiaries in North America, Middle East and China also support this business in getting an extended customer reach.

The Industrial Ceramics business based out of India is largely a global business and majority of the sales volumes are through exports. The Refractory business in India is predominantly a local business.

The Company is one of the major players in India, Australia and Russia in specific product groups.

### Industry Scenario

There has been no significant change in the Ceramics industry structure in India, which is catered to by a few major players.

With the acquisition of manufacturing assets and customer database of NTK, Japan in FY 2015-16, the Company is now the second largest producer of Metallized Cylinders in the world. In the Wear Ceramics space, there are six major players globally - the Company is one of the reputed players in the world. In the Engineering Ceramics, there are around five players globally with the Company being relatively smaller in size.

In Australia, CUMI is one of the major players in the Lined Equipment and Mineral processing industry. There are about a dozen players in the industry, most of whom market products imported from China and USA.

Refractory industry in India is a highly fragmented market with a market size of around ₹60 billion. The Company's product profile caters to the top end temperature range applications.

The Refractory industry in Russia is a highly fragmented market and Volzhsky Abrasives Works (VAW) caters primarily to the Aluminium industry in Russia.

### Sales Overview

Revenues (excluding excise duty) of the Ceramics business grew by 9 per cent on a standalone basis from ₹3688 million to ₹4013 million.

Metallized Cylinders and Wear Ceramics products business continued the marketing efforts in targeting newer markets and partnering with global customers. Selective price increases were taken for majority of the products to mitigate cost push. Significant efforts in repair and maintenance of domestic Wear ceramics led to ceramic conversion of key equipment by customers in Steel and Cement Industry. The business established entry into Japanese markets through qualifications at OEM's for supply of Ceramic lined bends. New products with backing materials were developed for addressing high impact applications. The business participated in Industry specific expos like Ceramitec, Powergen, Japan Fine Ceramics Expo, Hannover Messe, Fuel Cell Expo etc., to increase visibility, business development and for keeping abreast with the changing technology.

The Refractory business delivered good growth compared to the previous year. The division's sales were driven by growth in Fired Refractories and Anti-corrosive segments. The business bagged Annual rate contracts from Steel and Cement players. This business is likely to benefit from the commodity upcycle and expansion of capacity in user industry viz., Steel, Cement, Carbon Black, Glass etc. In Russia, Nitride Bonded Silicon Carbide Refractories, registered growth in revenues.

## Key Financial Summary

₹ million

| Particulars | Standalone | | | Consolidated | | |
|---|---|---|---|---|---|---|
| | 2017-18 | 2016-17 | Change (%) | 2017-18 | 2016-17 | Change (%) |
| Revenue (excluding excise duty) | 4013 | 3688 | 9 | 5025 | 4514 | 11 |
| Segment results (PBIT) | 542 | 509 | 6 | 759 | 704 | 8 |
| Capital employed | 2984 | 2820 | 6 | 3902 | 3694 | 6 |
| Share to total revenue of CUMI (%) (without eliminations) | 26 | 27 | | 22 | 22 | |
| Share to segment results (PBIT) of CUMI (%) | 26 | 28 | | 24 | 27 | |

### Manufacturing

The new Metallized Cylinder manufacturing line with assets from NTK, Japan was commissioned and the production commenced during the year. The total combined capacity of Metallized Cylinder now is 1.72 million numbers. Approval for new cylinders has been obtained from global customers after rigorous testing spanning over many months. The contract manufacturing for base level Ceramics which started in 2014-15 continued successfully during the current year. Third production line was established during the year enabling the business to cater to higher volume requirements from the customer.

The Industrial Ceramics division started its TPM journey in 2014-15 and with sustained and intense efforts, cleared TPM Health Check by CII TPM Club of India during January 2017. The division cleared the JIPM second stage assessment during November 2017 for TPM Excellence level I award, a key milestone in Company's quest for excellence. The division finally received the coveted Category A TPM Excellence award in March 2018 from JIPM.

Continuing its quest for manufacturing excellence, the rolled throughput yield has been on a continuous upward trajectory since 2015-16. Operation Equipment Effectiveness parameter also registered a new high during the year. The division could implement multi-cavity mould for near net shape moulding and commissioned Ceramic Injection Moulding line. In-house raw material was produced for Engineering Ceramics and Metallized Ceramics product enabling a better grip on the quality and the timely availability.

The Refractory business in last three years has invested in new technology mainly for Iron & Steel and Foundry industries. The business has also invested in consumable (flow control) products mainly for mini Steel industry and the products are taking its shape and developments on these product range have been proved with customers. These product lines are of standard regular consumables off the shelf. With strengthened dealer network, constant revenues has been planned during the coming year.

## Electrominerals

### Business Profile

The major product groups of this segment are Fused Alumina (comprising Brown and White Alumina), Silicon Carbide (crude, macro and fine), Fused Zirconia, Alumina Zirconia, Pearl Zirconia and Zircon Mullite. The Company also manufactures a range of 'specialities' like Semi Friable, Azure-S and fine powders for niche markets. The operations are carried out through eight manufacturing facilities located in India, Russia and South Africa.

The business focusses on aggressive growth in the export market with suitable product portfolios and provides customers with application specific products, with an objective to attain improved product profitability. For this, the business ensures speedy execution of projects and enhanced asset utilisation.

The business intends to continue its focus on special products through internal capability building and strategic partnerships in the market place to promote its products in different parts of the world.

Key user industries for this business are Abrasives, Refractories, Steel, Photovoltaic, Brake linings, Nuclear energy, Wooden laminates, Friction composites, Diesel Particulate Filter Semiconductor and others.

The business has captive bauxite mines, sand mines and a captive power plant.

### Industry Scenario

The focus on improving the ecosystem by initiating environmental regulations and pollution controls in China has brought about a paradigm shift in the industry. China has catapulted itself from a low cost producer of materials to a responsible supplier of quality products and an environmental compliant country. The other players including the Company, who were always into supplying quality products with superior environment friendly production processes, emerged more competitive in the transformed market. This new scenario has led to an inflationary situation.

The Fused Alumina installed capacity globally continued to be around 2 million tons with major capacities being in China, some of which could possibly be shut due to new environment regulations. The Company is largely a local player with customers based in India. Apart from the domestic players, imported products have a visible share in the Indian market. Competitive imports become favourable or unfavourable depending on Free Trade Agreements between countries, duty structures, country specific developments and exchange rates.

In the Silicon Carbide space, the installed capacity would be anywhere to the extent of 1.5 million to 2 million tons with large portion of it being in China. Here as well it can be estimated that some amount of capacities could be shut due to the current situation prevailing in China.

VAW, Russia with a capacity of 0.08 million tons is the one of the largest single location capacities in the world.

In the Fused Zirconia space, the global capacity could be approximately 0.07 million tons. China would occupy around 25 per cent of the global market. The Company with a capacity of 0.01 million tons is a significant player globally.

The Company continues to retain its position as one of the reputed manufacturers of Silicon Carbide and Fused Zirconia.

### Sales Overview

The Electrominerals business recorded revenues of ₹4055 million compared to last year standalone revenues of ₹3191 million.

The year 2017 was beneficial to the Company owing to stricter pollution controls and new environmental regulations in China. The fused aluminum oxide business of the Company capitalised this opportunity and increased its volume and prices in the domestic and international markets across product lines.

The fine powder business of Silicon Carbide at Kakkanad, Kerala has seen renewed heights with one of the world's largest manufacturer of Diesel Particulate Filter approving the fine powder for their requirement. The business registered good growth from a low base for this product category.

With the Automobile, Steel and Glass business starting to do better in 2017, the demand from Abrasives and Refractory customers were higher during the year.

The Russian subsidiary ran at near full capacity. The volumes were higher in the current year considering last year, the business registered lower production on account of transformer shutdown. The business being a significant net exporter in foreign currency, is mitigated from the risk of rouble currency fluctuations.

### Manufacturing

The business focused on manufacturing strategies like outsourcing of activities for augmenting volumes with minimum investment, protection of intellectual properties through appropriate process and product patents, spear heading innovation and TPM measures to be competitive and efficient in control of cost as an underlining measure to attain the targeted production volumes.

The relocated Alumina facility from South Africa scaled up and delivered the products as per the market requirements. The modernised Alumina plant with efficient furnace system gave the business the advantage of producing high end variants of Alumina. This also helped the business in augmenting the production and sales volume of Alumina beyond what was contemplated at the start of the year.

The raw material sourcing team had to grapple up with multiple challenges. Zircon Sand, Bauxite, Alumina and Electrode prices were facing turmoil in the international and domestic market. While the electrode price increase has affected the business, the long term contract for Alumina supply and own source of bauxite has insulated the business from the raw material price fluctuations for Fused Alumina business.

The shortage of availability and hike in raw material prices - Zircon sand and Electrode affected the scaling up of operations of relocated Zirconia Bubble facility, situated in India. The South African subsidiary, Foskor Zirconia which is into production of Monoclinic Zirconia was also affected due to volatile input pricing. A process modification in Zirconia processing is expected to give the bubble processing a cost advantage and an opportunity to use low end/local raw materials. A rationalisation in the price of electrode is expected in China and the business would be sourcing maximum requirement from these suppliers.

The Indian policy makers and regulators also enacted and introduced policies and regulations restricting usage of materials, mining activities and imposing stricter norms for environmental compliance. In this respect, the business faced challenges in sourcing raw materials like Petroleum Coke, Quartz and Bauxite. The business successfully identified alternate sources of suppliers and carried out efficiency improvements in production to tide over the situation.

New adjacencies were explored in the areas of Carbon and related businesses.

The Russian plant ran at full capacity in the current year without any production disruptions. Input costs were kept at market competitive levels by way of prudent sourcing strategies. The business continued in its journey of introducing various grit sizes in the market. Toughening of environmental regulations in China is estimated to augur well for the business going forward by way of price increase of Crystalline and Metallurgic product ranges.

The profit before interest and tax increased from ₹909 million to ₹1269 million on a consolidated basis.

### Key Financial Summary

₹ million

| Particulars | Standalone | | | Consolidated | | |
|---|---|---|---|---|---|---|
| | 2017-18 | 2016-17 | Change (%) | 2017-18 | 2016-17 | Change (%) |
| Revenue (excluding excise duty) | 4055 | 3191 | 27 | 8834 | 7489 | 18 |
| Segment results (PBIT) | 325 | 212 | 54 | 1269 | 909 | 40 |
| Capital employed | 2396 | 2488 | (4) | 5632 | 5514 | 2 |
| Share to total revenue of CUMI (%) (without eliminations) | 26 | 23 | | 38 | 36 | |
| Share to segment results (PBIT) of CUMI (%) | 16 | 12 | | 40 | 35 | |

## FINANCE

During the year, the Company generated ₹1316 million of cash surplus from its operations on a standalone basis.

All debts have been serviced on time. The Company's long and short term borrowings (other than financial lease of ₹18.1 million) as on 31st March 2018 stands Nil. The capital expenditure program of ₹577 million was financed from internal accruals.

The Company continued to have healthy cash generation in the year, due to prudent capital expenditure and efficient working capital management. The surplus has been parked in liquid mutual funds. The Company continues to be debt free despite capacities being created over the years. On similar lines, the debt at a consolidated level has come down by 17 per cent compared to the previous year from ₹1559 million to ₹1294 million. Borrowings net of cash and cash equivalent level at a consolidated level stands at ₹(553) million i.e Company has surplus cash.

The debt equity ratio for the Company, is almost nil at a standalone level and 0.08 at a consolidated level. The Company's Balance Sheet remains robust and it augurs well for the Company to venture into its next phase of growth.

The credit ratings of the Company, 'A1+' for short-term borrowings and 'AA+Stable' for long-term borrowings were re-affirmed by CRISIL. Over the years, the Company has been resorting to a prudent mix of rupee and foreign currency borrowings to finance its operations and achieve reduction in financing cost. The Finance Cost at a standalone level is at ₹15 million compared to ₹88 million last year. The Company earned ₹6 million by investing surplus cash available for short term.

At a consolidated level, the interest cost has come down from ₹181 million to ₹86 million. The repayment of loans has helped in bringing down the finance cost. The capital expenditure program of ₹920 million was financed from internal accruals.

With the Indian entity enjoying a significant natural hedge, a cautious approach was adopted to hedge the remaining exposures. The Company adopts prudent tax management policies.

There are no material changes and commitments, affecting the financial position of the Company which have occurred between 31st March 2018 and the date of this report.

## INDIAN ACCOUNTING STANDARDS (IND AS) - IFRS CONVERGED STANDARDS

The Company, its subsidiaries and joint ventures in India adopted Ind AS with effect from 1st April 2016 pursuant to the Companies (Indian Accounting Standard) Rules, 2015 notified by Ministry of Corporate Affairs on 16th February 2015.

## INTERNAL CONTROL

The Company has an Internal Control System commensurate with the size, scale and complexity of its operations. The controls have been designed and categorised based on the nature, type and the risk rating so as to effectively ensure the reliability of operations with adequate checks and balances.

The Internal Audit team evaluates the effectiveness and adequacy of internal controls, compliance with operating systems, policies and procedures of the Company and recommends improvements, if any. Significant audit observations and the corrective/preventive action taken or proposed to be taken by the process owners are presented to the Audit Committee. Periodic review of adherence to the agreed action plan is carried out. The scope of Internal Audit is annually determined by the Audit Committee considering the inputs from the Statutory Auditor and the Management.

Capital and revenue expenditure are monitored and controlled with reference to approved budgets. Investment decisions are subject to detailed evaluation and formal approval according to schedule of authority in place. Periodical review of capital expenditure with reference to benefits forecasted is done. Physical verification of assets is also periodically undertaken.

The Audit Committee reviews the overall functioning of Internal Audit on a periodical basis. The Committee also discusses with the Auditors periodically on their views on the financial statements including the financial reporting system, compliance with accounting policies & procedures, adequacy and effectiveness of the Internal Control Systems in the Company.

## INTERNAL FINANCIAL CONTROLS

Internal Control is a process, effected by an entity's Board of Directors, Management, and other personnel, designed to provide reasonable assurance regarding the achievement of objectives relating to operations, reporting and compliance - as defined by the Committee of Sponsoring Organisations (COSO) of the Treadway Commission (appointed by SEC USA).

As per Section 134 of the Companies Act, 2013, the term 'Internal Financial Controls' (IFC) means the policies and procedures adopted by the Company for ensuring:

(a) orderly and efficient conduct of its business, including adherence to company's policies,

(b) safeguarding of its assets,

(c) prevention and detection of frauds and errors,

(d) accuracy and completeness of the accounting records, and

(e) timely preparation of reliable financial information.

The three key components of IFC followed by the Company are:

i. Entity Level controls (ELC) that the management relies on to establish the appropriate "tone at top" relative to financial reporting are - Code of Conduct, Enforcement of Delegation of Authority, Hiring and Retention practices, Whistle blower mechanism and other approved policies and procedures.

ii. Process Level controls (PLC), to ensure that processes are predictable, stable and consistently operating at the targeted level of performance, with only a normal variation are classified into

Manual or IT - Dependent Manual or Automated Controls. They are also classified as Preventive or Detective.

iii. General IT Controls to ensure appropriate functioning of IT applications and systems built by the Company to enable accurate and timely processing of financial data are - User Access rights management and Logical access; Change management controls; Password policies and practices; Patch management and License management; Backup and Recovery of data.

The adequacy of Internal Financial Controls is ensured by:

- Documentation of the risks and controls associated with the major processes;
- Validation and classification of existing controls to mitigate risks;
- Identification of improvements and upgrades to the controls;
- Improving the effectiveness of controls on residuary risks through data analytics;
- Performing testing of controls by the independent Internal Audit;
- Implementation of sustainable solutions to Audit observations.

The Audit Committee periodically evaluates Internal Financial Controls to ensure that they are adequate and operating effectively.

## HUMAN RESOURCES

The Company's focus on the key organisational asset - its employees remains top priority. The Company continues to focus on hiring right candidates, looking at the employee's entire life cycle, ensure timely interventions that help build a long lasting and fruitful career for them. With this in mind, the Company has initiated several positive changes in its Human Resource practices during the year. Being a material science technology Company innovation, learning & development, capability development are significant tools for keeping the employees engaged in making materials matter.

### Innovation

As business world becomes more complex and competitive, the necessity of innovation becomes the primary focus of any successful organisation. Leveraging the prevailing culture of freedom to perform there has been a focused effort in seeding innovation and nurturing ideation in the Company. CUMind - a customised innovation framework, based on the design thinking methodology was launched across all SBUs during the year. This framework enables entrepreneurial minds to conceive, design and deliver new products, businesses, processes and innovations for CUMI irrespective of their role or function. Grouped under the umbrella of CUMind, there are four different types of modules - DOT, LOG, CUBE and ARC (class room learning modules to prototype). Employees in business divisions as well as corporate have gone through these structured workshops and many more are planned in the coming years. During the year, an IPR manual was developed in-house to serve as a ready reckoner for employees to protect the various kinds of IPRs being created within the Company.

Results of this initiative is very visible, as the workshop projects have led to increasing patents being filed by the Company. Additionally to keep the spotlight on innovation, patents and copyrights are being regularly monitored by the leadership.

### Capability Building and Talent Development

The Company's experience in grooming internal talents benefitted the organisation immensely. Last year saw the launch of the CUMI Leadership Program in academic collaboration with a premier B-School in Chennai. This highly coveted programme was designed to prepare the identified High-potential talent for leadership roles and higher responsibilities. The program covered various management topics like Business Strategy, Marketing Management, Personal Growth Lab etc. Now, the participants are working on individual projects to implement the learnings from these classroom modules. In addition to this, a set of young managers from CUMI who were selected after a rigorous assessment, have successfully completed the Young Leadership Program at the Group level.

### Learning & Development

The Company's endeavor to be a learning organisation continued regardless of the business conditions. The training initiatives have been re-defined with the objective of building capability across the organisation into a 5 Pillar approach to training. These five pillars are categorised as needs arising out of performance gaps, training to manage specific business requirements appropriate to work levels.

A series of initiatives were taken to scale up management and leadership capabilities at different levels. At the base of the pyramid, supervisory development workshops were launched for to improve crucial soft skills which are delivered online in hour-long modules every week for six months. The new managers underwent a transition program on "Managing High Performance Team" where they were introduced to different skills and work styles. On the people side of the management, seasoned managers were part of a program on "Managers as Coaches" conducted by the Murugappa Development Centre that introduced them to coaching, counselling and mentoring as a form of grooming team members.

As the Company's workforce is getting younger, the training methods are being revamped to suit the Millennials. The Graduate Engineer trainee batch, were part of a blended learning initiative called YOLO (Your Own Learning Opportunity), to manage their transition into a workplace in a systematic and effective manner. This is a year-long intervention consisting of a combination of behavioral and basic work related technical skills.

A program to focus exclusively on the Four Disciplines of Execution was launched for the Abrasives division to propel performance through excellence in Execution. This model involved weekly WIG (Wildly Important Goal) sessions, coaching and structured follow-up. This was complemented by a pricing workshop for the sales to get an insight into the pricing process.

A new frontier Thors e-learning, US was introduced in training with a focus on enhancing technical and problem solving skills through contemporary training methodologies to cater to different learning preferences of the workforce. In-house e-learning modules have been developed to capture tacit knowledge in niche areas. In the boundary less world that we now live and work, it is important to develop sensitivity to different cultures and work styles - "Globesmart" tool has been introduced, employees interfacing with global clients and vendors have been provided access to an online learning tool.

### Talent Acquisition

CUMI's efforts of bringing in diverse workforce from premier engineering and management institutes across different geographies (as pipeline of talent for future) continued during the year. The talents identified and on board the Company have been given exciting projects, some in areas of adjacencies as well as breakthrough products. In order to nurture the new recruits and align them with the objectives of the organisation, various initiatives like mentoring by senior leaders have been used extensively to connect and communicate.

### Career Progression

The Career Progression Framework has been used in about 40 per cent employee movements during the year. Employee transitions involve increase in responsibilities, change in location/SBU/department etc. and this framework ensures employees expand their experience across various platforms and technologies so that they will have a broader view of the business to take up larger roles in future.

### Performance

With changes in business expectations, the Performance Management System has also been modified and improved to have better alignment with the performance and goals. The performance management process for senior roles introduced individual qualitative assessment on parameters like People leadership, Execution Excellence and Process Excellence; thus keeping these as the focus areas of performance. Customer Centricity (internal or external) and Innovation is being added as part of performance assessment for them. Robust performance system with inbuilt feedback process caters to addressing the performance gaps as well, wherever required. Additional qualitative assessment on specified parameters helps keeping focus on customer, people and results.

### Sponsoring Higher Education

Employees from various SBUs have successfully completed their Company sponsored Masters of Technology in Manufacturing Management course, through a Distance Learning module. This program has been a great success over the years, both in terms of enhancing the capabilities of the employees and as a pride-inducing factor. Similarly a certification program has been launched for junior supervisors in collaboration with a reputed engineering college. The curriculum covers technical modules applicable for supervisor cadre and has been jointly developed by the Company and the college. There are periodic assessments through written tests, mini projects and internal marks.

### Employee Relations

The drivers of Employee Engagement Dipstick survey were the guiding light of all employee related initiatives across the Company. The Hosur Bonded Abrasives unit and the Koratty Minerals unit have successfully signed Long Term Settlement during the year. As an outcome of the settlement, there is significant improvement in the flexibility and productivity. Industrial relations have been very cordial and productive across all units.

The Company continues its commitment to employ and empower women through various initiatives including extended maternity leave policies and friendly work place policies. The Company has a policy on prevention of Sexual Harassment at workplace in line with the requirement of the Sexual Harassment of Women at the Workplace (Prevention, Prohibition & Redressal) Act, 2013. An Internal Complaints Committee (ICC) has been set up to redress any complaint regarding sexual harassment and the ICC did not receive any complaint during the year.

In alignment with the sustainable community building philosophy, the CUMI Center for Skill Development at Hosur and Edapally continued to play a significant role in honing the skills of its students from the less privileged community to support their eventual employment. The Company and its employees work closely with the communities in the neighbourhood of its plants and provides need based support including children's education, infrastructure development, medical camps and tree planting and other eco-friendly initiatives. For more details refer the Corporate Social Responsibility section of this Report.

### Safety and Health

Offering a safe workspace has always been a priority for the Company. The Safety Risk mitigation plan was meticulously enforced during the year. The efforts in terms of safety patrolling, identifying & removing unsafe conditions, analysing near misses & eliminating them and offering training to maintain awareness amongst the operating teams continued. Safety Manuals have been prepared and published. Mandatory health check-ups and the online health monitoring system helps in actively tracking the health and associated risks for employees. Additionally, the behavioural safety awareness programmes through safety kiosks have been set up and are now functional in units.

## ACHIEVEMENTS AND AWARDS

The year 2017-18 continued to be a year of recognition for the Company in varied fields.

The Sriperumbudur & Maraimalar Nagar plants, recipients of the prestigious Japan Institute of Plant Maintenance (JIPM) for TPM excellence in year 2015 received the JIPM award for Excellence in Consistent TPM commitment during the year. The Bonded Abrasives Plant and the Industrial Ceramics Plant in Hosur were conferred the JIPM award for TPM excellence in Category A this year marking a historical event of four divisions of the Company being recognised with these coveted awards in Kyoto, Japan during March 2018.

The Company also received the Golden Peacock award for Corporate Governance in the engineering sector for the year 2017 in due recognition of its governance practices.

The Electrominerals division was conferred HR excellence award by the Confederation of Indian Industry (CII). The Maniyar team of this division also won the Safety award 2017 from the Factories & Boilers department, Government of Kerala.

The total staff on rolls of the Company (including joint ventures and subsidiaries) as on 31st March 2018 was 5074 with 3285 employees in India (previous year 5203 with 3427 employees in India).

## PERFORMANCE OF SUBSIDIARIES

Volzhsky Abrasive Works, Russia operated its Silicon Carbide plant to near capacity. Sales increased from RUB 4267 million to

RUB 5095 million due to higher volumes in Silicon Carbide and uninterrupted production. Abrasives and Refractories sales grew compared to last year owing to introduction of new products and expanding target markets. On the profitability front, the entity registered a growth in profitability (after tax) from RUB 585 million to RUB 814 million.

Foskor Zirconia, South Africa recorded a sales of ZAR 155 million compared to ZAR 191 million last year. The entity's profit after tax dropped from 5 million ZAR loss to a loss of 33 million ZAR. The adverse movement arose due to significant high input cost and lower sales volumes.

In CUMI Australia, the business in Lined Equipment continued to be good. Sales grew from AUD 16.3 million to AUD 18.1 million. Profit after tax grew from AUD 2 million to AUD 2.1 million.

Sterling Abrasives had a sales of ₹803 million, compared to the last year's sales of ₹712 million. Profit after tax increased from ₹66 million to ₹91 million. The user industry for this company is primarily the agro industry.

CUMI Abrasives and Ceramics Company, the Chinese subsidiary had a sales of CNY 22 million for the year, which is same as last year's level. The loss was CNY 0.9 million compared to profit of 0.06 million last year.

The sales of CUMI America recorded a good growth - USD 7.5 million from USD 6.2 million driven mainly by the increase in sales of both Bonded Abrasives and Industrial Ceramics. The loss was at 0.5 million USD in the current year as against USD 1.5 million loss in the previous year.

For CUMI Middle East, sales grew from USD 2.3 million to USD 3.2 million. Profits for the year were at USD 0.12 million against a profit of USD 0.07 million during the previous year.

Southern Energy Development Corporation Limited (SEDCO), the gas based power generation subsidiary, recorded a sales of ₹239 million as against ₹265 million last year consequent to constrained supply in gas from Oil and Natural Gas Corporation. Profit after tax de-grew from ₹62 million to ₹51 million.

Net Access India, which provides IT facilities management and other allied services increased its sales from ₹394 million to ₹401 million. Profit after tax grew from ₹24.1 million to ₹27.3 million.

CUMI International Limitd, Cyprus recorded a revenue of USD 5.1 million representing mainly dividend income as against last year's income of USD 5.5 million.

CUMI Europe s.r.o, based out of Europe made a loss of CZK 2.6 million.

Performance of associates and joint ventures are given in note no. 6A and 6B respectively of the consolidated financials. Consolidated Financial Statements (incorporating the financial results of the Company, its subsidiaries and associates/joint ventures) have been provided in the Annual Report. Other than the associates/joint ventures referred in the Annual Report, there are no associate/joint venture companies within the meaning of Section 2(6) of the Companies Act, 2013. A statement containing the key financial highlights of each subsidiary, based on the Financial Statements prepared by them under applicable local regulations for their respective financial years, is also provided in the Annual Report.

## ENTERPRISE VALUE ADDITION

The Company has been able to constantly add value and the summary of value addition is given below in the table:

₹ million

| Particulars | 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
|---|---|---|---|---|---|
| **Generation of Gross Value added** | **4550** | **3959** | **3789** | **3071** | **2829** |
| (Excludes exceptional income) | | | | | |
| **Breakup on Application of Value added** | | | | | |
| Payment to employees and directors | 1760 | 1549 | 1429 | 1309 | 1270 |
| Payment to shareholders (on payment basis) | 330 | 189 | 377 | 235 | 281 |
| Payment to Government | 732 | 543 | 564 | 374 | 349 |
| Payment to Lender | 0 | 33 | 64 | 49 | 44 |
| Towards replacement and expansion | 1728 | 1645 | 1355 | 1104 | 885 |
| | **4550** | **3959** | **3789** | **3071** | **2829** |

- *Gross value added is Revenue Less Expenditure (excluding depreciation + expenditure on employee & directors service + Long term interest)*
- *Payment to Government is Current tax + Dividend distribution tax*
- *Towards replacement and expansion is Retained earning + Depreciation + Deferred tax*

## RISKS, CONCERNS AND THREATS

The Company has constituted a Risk Management Committee aligned with the requirements of the Companies Act, 2013 and Listing Regulations. The details of the Committee and its terms of reference are set out in the Corporate Governance Report forming part of this Report.

The Company has a robust business risk management process to identify, evaluate and mitigate risks impacting business including those which may threaten the existence of the Company. This framework seeks to create transparency, minimise adverse impact on the business objectives and enhance the Company's competitive advantage. This also defines the risk management approach across the enterprise at various levels including documentation and reporting. The framework has different risk models which help in identifying risk trends, exposure and potential impact analysis at a Company level as also separately for the business segments. The Company also has developed a structured risk management policy encompassing the risk management objectives, principles, process, responsibility for implementation, maintenance of risk registers, risk reporting framework etc. Risk management also forms an integral part of the Company's Business Plan.

The Company operates across various technology platforms and product verticals built over the years. Relative advantages and disadvantages of such technologies are studied and advances are tracked. Any new technology may impact the performance of the Company in the long run. The Company seeks to address these technology gaps through continuous benchmarking of the existing manufacturing processes with developments in the industry and in this connection has made arrangements with technical research institutions and technology consultants. The Company has been making investments in the next level of Industry 4.0 in select modules. Industry 4.0 is the current trend of automation and data exchange in manufacturing technologies.

Considering that Electrominerals products are produced by way of fusion process which consumes a lot of electricity, power cost remains one of the key levers which can favourably or adversely affect our profitability based on the changes in the electricity cost. Apart from pricing, in some locations, availability of power becomes a constraint. Getting access to captive power and creating facilities for captive power generation continues to be a vital strategy of CUMI. The Company also explores ways to source power from open access at competitive rates.

Fuel cost increase is another area of concern. Petroleum based products are used, either as a direct raw material or as a fuel for the firing process. Any increase in the cost of fuel impacts the profitability adversely. Improvements in firing technologies are avenues which the Company continues to pursue for dealing with the challenges. The Company is also pursuing projects to reduce the risk exposed on variability of fuel prices.

The Company deals with multiple currencies and is thus exposed to translation risk on account of adverse currency movements. Foreign Exchange risk on foreign denominated loans, imports and exports are mitigated by adopting a country-based Forex policy, periodic monitoring and use of hedging instruments. Efforts are being taken to manage both exports and imports to ensure that at Company level, there is a natural hedging mechanism.

As a risk mitigation measure of the cyber security threat and in continuation of the IT security review plan, during the year the Company undertook a mobile application security assessment as well as a review of the security programme management. The findings were deliberated and the priorities drawn out including promoting information security awareness amongst the employees, strengthening network security posture, installing security incidence & event management platform, carrying out proactive vulnerability assessment & penetration testing etc. and enhancing Information Security policies & procedures across various business units.

The Company's input materials are not commoditised and does not warrant any specific hedging to be undertaken. With respect to output materials, adverse impact of changes in commodity prices on user industries could impact the sales which are mitigated by development of alternate products, establishing new range of applications etc. as detailed above. The other mitigation measures for dealing with increase in fuel costs, non-availability of raw materials etc. have been dealt separately in the above paragraphs.

## BUSINESS OUTLOOK AND OPPORTUNITIES

Global growth is expected at 3.9 per cent next year as per IMF supported by strong momentum, favourable market sentiment and recovery in commodity prices favouring commodity exporters.

Reversing two years of declining growth, Indian economy is set to expand at 7.3 per cent in 2018-19 and at 7.6 per cent in 2019-20, aided by various growth oriented new policy measures, as per Asian Development Bank. India would become the fastest growing large economy for next two years given that China's growth forecast is lower than that of India. The main growth driver for Indian economy would be rural consumption, continued infrastructure development projects and healthy exports growth on the back of pick-up in growth in advanced economies.

The pick-up in infrastructure capex - Central Government's road construction push - Bharatmala Pariyojana would be significantly positive for the Company.

Normalisation of domestic markets post GST disruption, growth of Stainless Steel, Aerospace, Railways and Robotic industries, Urbanisation & Infrastructure and Light weighting trends will favourably impact Company's business.

Growth in Automobiles and Auto ancillary industry would open up opportunities for high performance Minerals and Abrasives business. Growth in commercial vehicles led by pick up in infrastructure capex, increased mining activity and commodity business, would favourably impact Company's business.

The Company's significant share of sale comes from outside India. Globally, the marketing and manufacturing entities are spread across Middle East, Europe, China, Russia and North America. The uptick is the global economy with rising commodity price would benefit the

Company. The demand for the Company's products would be favourably spurred by industrialisation activity, rising per capita income and consumer spending, enhanced manufacturing activities and increase in investments.

## FIXED DEPOSITS

The Company has not accepted any deposits from the public falling within the ambit of Section 73 of the Companies Act, 2013 read with Companies (Acceptance of Deposits) Rules, 2014 and no amount of principal or interest was outstanding as on the Balance Sheet date.

## LOANS AND INVESTMENTS

The particulars of loans, guarantees and investments covered under Section 186 of the Companies Act, 2013 are given below:

₹ million

| Description | As on 31.03.2017 | Movement (Net of Deletions) | As on 31.03.2018 |
|---|---|---|---|
| Loans given by the Company | - | - | - |
| Corporate guarantee given by the Company | 1691.08 | 35.56* | 1726.64 |
| Investments made by the Company | 2541.16 | 27.41** | 2568.57 |

**Due to Exchange difference*

***On account of fair valuation*

Current Investments - investment in mutual funds as on 31.03.2018 was ₹544.79 million.

## RELATED PARTY TRANSACTIONS

The Company as per the requirements of the Companies Act, 2013 and Regulation 23 of the Listing Regulations has a Policy for dealing with Related Parties.

In line with its stated policy, all Related Party transactions are placed before the Audit Committee for review and approval. Prior approval of the Committee is obtained on a quarterly basis for transactions which are of foreseen and repetitive nature. Omnibus approvals in respect of transactions which are not routine or which cannot be foreseen or envisaged are also obtained as permitted under the applicable laws. The list of Related Parties is reviewed and updated periodically as per the prevailing regulatory conditions.

The details of transactions proposed to be entered into with Related Parties are placed before the Audit Committee for approval on an annual basis before the commencement of the financial year. Thereafter, a statement containing the nature and value of the transactions entered into by the Company with Related Parties is presented for quarterly review by the Committee. Further, revised estimates or changes, if any to the proposed transactions for the remaining period are also placed for approval of the Committee on a quarterly basis. Besides, the Related Party transactions entered during the year are also reviewed by the Board on an annual basis.

All transactions with Related Parties entered during the financial year were in the ordinary course of business and on an arm's length basis. There are no materially significant related party transactions made by the Company with its Promoters, Directors, Key Managerial Personnel or their relatives which may have a potential conflict with the interest of the Company at large. There are no contracts or arrangements entered into with Related Parties during the year to be disclosed under Sections 188(1) and 134(h) of the Companies Act, 2013 in form AOC-2.

The Company's policy on dealing with Related Parties as approved by the Board is available on the Company's website at the following link *https://www.cumi-murugappa.com/policies.html.* None of the Directors and KMPs had any pecuniary relationship or transaction with the Company other than those relating to remuneration in their capacity as Directors/Executives and corporate action entitlements in their capacity as shareholders of the Company.

## CORPORATE SOCIAL RESPONSIBILITY

The Murugappa Group is known for its tradition of philanthropy and community service. The Group's philosophy is to reach out to the community by establishing service oriented philanthropic institutions in the field of education and healthcare as the core focus areas. The Company being a constituent of the Group has been upholding this tradition by earmarking a part of its income for carrying out its social responsibilities.

The Company continues to engage in Corporate Social Responsibility (CSR) activities directly as well as through implementation agencies.

The Company set up the CUMI Centre for Skill Development (CCSD) in year 2012 at Hosur, to build a skill bank of a technically competent and industry ready work force from the less privileged sections of the Society. During the FY 2015-16, the Company replicated this model in Edapally, Cochin. CCSD provides specialised training based on National Council on Vocational Training syllabus for the rural youth drawn from socially and underprivileged sections of the society. Three year training is imparted with a stipendiary payment and free boarding facilities, thus enabling the enrolled students to earn while they learn. The job oriented skill training enhances their employability and aids in uplifting their socioeconomic status. The technically trained students can be employed by any industrial entity once they complete the training programme. The Company continues to harness the potential of CCSD centres so far established. During the year, 64 students from the CCSD, Hosur passed with flying colours and graduated from the Centre. The Company takes pride in informing that few students have earned accolades at national/ regional level for their par excellence performance in academic and technical areas.

In addition to the CCSD, the Company has also been contributing to the cause of health and education by making grants to AMM Foundation, an autonomous charitable trust, engaged in philanthropic activities in the field of education and healthcare since 1953. During the year, the Company's focus areas for these grants were in the education sector through contributions to Vellayan Chettiar Higher Secondary School, Tiruvottiyur (VCHSS) - which has been making a difference in the field of education for the past 50 years. The school runs with the vision - To provide Quality Education with good virtues, for the under privileged and marginalised communities around Tiruvottiyur. With an objective to provide the students of the VCHSS adequate facilities for excelling in sports, the Company through the agency undertook a project during the year for development of playground (football ground) in addition to meeting the running expenditure of the school. Besides the above, the Company also actively pursued local community assistance programmes in and around its plant and office locations anchored by its employees. The Company's CSR policy is available on the Company's website at the following link *https://www.cumi-murugappa.com/ policies.html.* The Annual report on the CSR activities in the prescribed format is annexed hereto as Annexure A and forms part of this Report.

## BUSINESS RESPONSIBILITY REPORTING

The Company's ethical and responsible behaviour complements its corporate culture. Being a public listed company, the Company recognises that its accountability is not limited only to its shareholders from a financial perspective but also to the larger society in which it operates. During 2016-17, consequent to the mandatory reporting of its business responsibility initiatives under the Listing Regulations, the Company had formulated a consolidated Policy on Business Responsibility which lays down the broad principles guiding the Company in delivering its various responsibilities to its stakeholders. The Policy is intended to ensure that the Company adopts responsible business practices in the interest of the social set up and the environment so that it contributes beyond financial and operational performance. A copy of the Policy is available at *https://www.cumi-murugappa.com/policies.html* and the Business Responsibility Report for the year ended 31st March 2018 in terms of Regulation 34 of the Listing Regulations is annexed to this report as Annexure B.

## GOVERNANCE

### Board of Directors and Key Managerial Personnel

As at 31st March 2018, the Board of the Company comprised nine Directors of which majority (six) are independent. During the year, Mr. P S Raghavan and Mr. Sujjain S Talwar were appointed as Additional Directors and their appointment as Independent Directors of the Company for a term of 5 years effective 9th May 2017 was approved by the shareholders at the 63rd Annual General Meeting held on 31st July 2017.

Mr. M Lakshminarayan and Mr. Shobhan M Thakore, Independent Directors who were appointed for a term of three years at the 60th Annual General Meeting held on 1st August 2014 retired on 31st July 2017. The Board places on record its appreciation for the services rendered by Mr. Lakshminarayan and Mr. Shobhan Thakore during their tenor as Directors of the Company including as members of the various Committees of the Board.

Following the changes in the Board composition, the constitution of the various Committees of the Board were also reviewed and revised during the year, the details of which are provided in the Corporate Governance Report.

Further, the shareholders at the last Annual General Meeting held on 31st July 2017 approved the re-appointment of Mr. K Srinivasan for a further period of two years from 23rd November 2017 till 22nd November 2019.

Mr. M A M Arunachalam, retires by rotation at the forthcoming Annual General Meeting and being eligible has offered himself for re-appointment. A proposal for his re-appointment is included in the Notice convening the 64th Annual General Meeting for consideration and approval by the shareholders.

The Company has received declarations from all its Independent Directors confirming that they meet the criteria of independence prescribed both under the Companies Act, 2013 and the Listing Regulations.

Mr. K Srinivasan, Managing Director and Ms. Rekha Surendhiran, Company Secretary continue to be the Key Managerial Personnel of the Company as per Section 203 of the Companies Act, 2013. During the year, Mr. Sridharan Rangarajan stepped down from his position as Chief Financial Officer of the Company effective the closing hours of 17th January 2018 on account of his elevation as President & Group - CFO of the Murugappa Group. The position of the Chief Financial Officer is vacant since then and the Company having identified suitable candidate(s) is in the process of filling up the vacancy.

### Board Meetings

During the year, six Board Meetings were held, the details of which are given in the Corporate Governance Report.

### Board Evaluation

Pursuant to the provisions of the Companies Act, 2013 and the Listing Regulations, the Board carried out an annual performance evaluation of its own performance, the Directors individually as well as the evaluation of the working of its various Committees as per the evaluation framework adopted by the Board on the recommendation of the Nomination and Remuneration Committee. Structured assessment forms were used in the overall Board evaluation comprising various aspects of the Board's functioning in terms of structure, its meetings, strategy, governance and other dynamics of its functioning besides the financial reporting process, internal controls and risk management. The evaluation of the Committees was based on their terms of reference fixed by the Board besides the dynamics of their functioning in terms of meeting frequency, effectiveness of contribution etc.

Separate questionnaires were used to evaluate the performance of individual Directors on parameters such as their level of engagement and contribution, objective judgement etc. The Managing Director's evaluation was based on leadership qualities, strategic planning, communication, engagement with the Board etc.

The Chairman was also evaluated based on the key aspects of his role. The performance evaluation of the Independent Directors was carried out by the entire Board. The performance evaluation of the Chairman, the Board as whole and the Non-Independent Directors was carried out by the Independent Directors at their separate meeting held during the year.

### Policy on Appointment and Remuneration of Directors

Pursuant to Section 178(3) of the Companies Act, 2013, the Nomination and Remuneration Committee of the Board has formulated the criteria for Board nominations as well as the policy on remuneration for Directors and employees of the Company.

The criteria for Board nominations lays down the qualification norms in terms of personal traits, experience, background and standards for independence besides the positive attributes required for a person to be inducted into the Board of the Company. Criteria for induction into Senior Management positions have also been laid down.

The Remuneration policy provides the framework for remunerating the members of the Board, Key Managerial Personnel and other employees of the Company. This Policy is guided by the principles and objectives enumerated in Section 178(4) of the Companies Act, 2013 and reflects the remuneration philosophy and principles of the Murugappa Group to ensure reasonableness and sufficiency of remuneration to attract, retain and motivate competent resources, a clear relationship of remuneration to performance and a balance between rewarding short and long-term performance of the Company. The policy lays down broad guidelines for payment of remuneration to Executive and Non-Executive Directors within the limits approved by the shareholders. Further details are available in the Corporate Governance Report.

The Board Nomination criteria and the Remuneration policy are available on the website of the Company at *https://www.cumi-murugappa.com/policies.html.*

## Composition of Audit Committee

The Audit Committee of the Board comprises only Independent Directors. Mr. T L Palani Kumar is the Chairman and other members are Mr. Sanjay Jayavarthanavelu, Mrs. Bharati Rao and Mr. Sujjain S Talwar who was inducted into the Committee on 9th May 2017 in view of the retirement of Mr. M Lakshminarayan on 31st July 2017. During the year, five Audit Committee meetings were held, the details of which are provided in the Corporate Governance Report.

## Statutory Auditors

During the year, the office of M/s. Deloitte Haskins & Sells, Chartered Accountants, (FR No. 008072S) Chennai as the Statutory Auditors of the Company expired at the conclusion of the 63rd Annual General Meeting (AGM) held on 31st July 2017. The Board places on record its appreciation for the services rendered by M/s Deloitte Haskins & Sells during their long tenor as Auditors of the Company.

In line with the requirements of the Companies Act, 2013, the Company with the approval of the shareholders at the Annual General Meeting held on 31st July 2017 appointed M/s. Price Waterhouse Chartered Accountants LLP, (Reg. No. FRN 012754N/N500016) (PWC) as the Statutory Auditors of the Company to hold office from the conclusion of 63rd Annual General Meeting until the conclusion of the 68th Annual General Meeting at a remuneration of ₹38,66,000/- for the FY 2017-18 subject to annual ratification by the shareholders at every AGM, if required under the relevant provisions of the Act at a remuneration decided by the Board based on the recommendation of the Audit Committee. The Companies (Amendment) Act, 2017 has dispensed with the requirement of annual ratification of the Statutory Auditor's appointment. However, as on the date of this report, the said provision has not yet been notified. In case the above is not notified prior to the date of the Annual General Meeting, then the proposal seeking approval of the shareholders for ratification of the Auditor's appointment would be placed at the 64th AGM. The Board at its meeting held on 4th May 2018, based on the recommendation of the Audit Committee, has determined the remuneration of the Statutory Auditors as ₹42,00,000/- for the FY 2018-19 (excluding out of pocket expenses incurred by them in connection with the Audit and applicable taxes).

As required under Regulation 33 of the Listing Regulations, the Auditors have confirmed that they hold a valid certificate issued by the Peer Review Board of the Institute of Chartered Accountants of India.

The Report given by M/s. Price Waterhouse Chartered Accountants LLP on the Financial Statements of the Company for the year ended 31st March 2018 is provided in the financial section of the Annual Report. There are no qualifications, reservations, adverse remarks or disclaimers given by the Auditors in their report.

## Cost Auditors

Pursuant to Section 148 of the Companies Act, 2013 read with Companies (Cost Records and Audit) Rules, 2014 and amendments thereof, the Company is required to maintain cost accounting records in respect of products of the Company covered under CETA categories like Organic and Inorganic chemicals, Electrical or Electronic machinery, Steel, Plastic and Polymers, Ores and Mineral products, other Machinery, Base Metals etc. Further, the cost accounting records maintained by the Company are required to be audited.

The Board, on the recommendation of the Audit Committee, had appointed M/s. S Mahadevan & Co. (firm no. 000007), Cost Accountants, Chennai to audit the cost accounting records maintained by the Company under the said Rules for the FY 2017-18 on a remuneration of ₹400,000/-. Further, the said firm has also been appointed by the Board to conduct the cost audit for the FY 2018-19 at the same remuneration.

The Companies Act, 2013 mandates that the remuneration payable to the Cost Auditor is ratified by the Members. Accordingly a resolution seeking the shareholder's ratification of the remuneration payable to the Cost Auditor for the FY 2018-19 is included in the Notice convening the 64th Annual General Meeting.

## Secretarial Audit

M/s. R Sridharan & Associates, Practising Company Secretaries, Chennai was appointed as the Secretarial Auditor to undertake the Secretarial Audit of the Company for the FY 2017-18. The report of the Secretarial Auditor is annexed to and forms part of this Report (refer Annexure F). There are no qualifications, reservations, adverse remarks or disclaimers given by the Secretarial Auditor in the Report.

## Compliance Management

The Company's in house compliance management system tracks compliances across the various factories and offices of the Company. This tool has a comprehensive coverage of the various applicable laws and is periodically updated based on the regulatory changes.

## Corporate Governance

In terms of Regulation 34(3) read with Schedule V of the Listing Regulations, a separate section on Corporate Governance including the certificate from a Practising Company Secretary confirming compliance is annexed to and forms an integral part of this Report.

## CEO/CFO Certificate

Mr. K Srinivasan, Managing Director has submitted a certificate to the Board on the integrity of the Financial Statements and other matters as required under Regulation 17(8) of the Listing Regulations.

## DIRECTORS' RESPONSIBILITY STATEMENT

Pursuant to the provisions contained in Section 134(3)(c) of the Companies Act, 2013, the Board to the best of its knowledge and belief and according to the information and explanations obtained by it confirm that:

- in the preparation of the annual accounts, for the financial year ended 31st March 2018, applicable accounting standards have been followed and no material departures have been made from the same;
- the accounting policies mentioned in Note 3 of the Notes to the Financial Statements have been selected and applied consistently and judgments and estimates that are reasonable and prudent have been made so as to give a true and fair view of the state of affairs of the Company at the end of the financial year and of the profit of the Company for that period;
- proper and sufficient care has been taken for the maintenance of adequate accounting records in accordance with the provisions of the Companies Act, 2013 for safeguarding the assets of the Company for preventing and detecting fraud and other irregularities;
- the annual accounts have been prepared on a going concern basis;
- that internal financial controls to be followed by the Company have been laid down and that such internal financial controls are adequate and operating effectively;
- proper systems have been devised to ensure compliance with the provisions of all applicable laws and that such systems are adequate and operating effectively.

## EXTRACT OF ANNUAL RETURN

The extract of the Annual Return in the prescribed form MGT 9 is annexed to and forms part of this Report (refer Annexure E).

## SECRETARIAL STANDARDS

The Company is in compliance with the Secretarial Standard on Meetings of the Board of Directors (SS-1) and Secretarial Standard on General Meetings (SS-2).

## ENERGY CONSERVATION, TECHNOLOGY ABSORPTION AND FOREIGN EXCHANGE EARNINGS & OUTGO

The information on energy conservation, technology absorption, expenditure incurred on Research & Development and forex earnings/ outgo as required under Section 134(3)(m) of the Companies Act, 2013 read with Rule 8 of the Companies (Accounts) Rules, 2014 is annexed to and forms part of this Report (refer Annexure C).

## SIGNIFICANT AND MATERIAL ORDERS PASSED BY THE REGULATORS OR COURTS

There are no significant and material orders passed by the regulators or courts or tribunals impacting the going concern status of the Company and its future operations.

## PARTICULARS OF EMPLOYEES

The information on employees and other details required to be disclosed under Rule 5 of the Companies (Appointment and Remuneration of Managerial Personnel) Rules, 2014 is annexed to and forms part of this Report (refer Annexure D).

Under the Company's Employee Stock Option Scheme 2007, no Option grants have been made since February 2012. The Employee Stock Option Plan 2016 (ESOP 2016) was implemented in February 2017 with the approval of the shareholders and currently governs the grant of Options to employees. During the year 2017-18, a grant of 70,214 options was made to eligible employees. The disclosures with respect to Options granted under the ESOP 2007 and ESOP 2016 are contained in the Corporate Governance Report. Further, the disclosures relating to Stock Options as per Securities and Exchange Board of India (Share based Employees Benefits) Regulations, 2014 read with the circular issued by SEBI on 16th June 2015 has been provided on the Company's website and is available in the link *https://www.cumi-murugappa.com/policies.html.* Both the ESOP Scheme 2007 and ESOP 2016 are in compliance with the SEBI (Share Based Employee Benefits) Regulations, 2014.

## ACKNOWLEDGEMENT

The Board gratefully acknowledges the co-operation received from various stakeholders of the Company viz., customers, investors, channel partners, suppliers, government authorities, banks and other business associates during the year. The Board also places on record its sincere appreciation of all the employees of the Company for their commitment and continued contribution to the Company.

On behalf of the Board

Chennai
May 4, 2018

**M M Murugappan**
*Chairman*

All information furnished in the annexures relates to Carborundum Universal Limited, India as a standalone entity

## ANNEXURE A

## ANNUAL REPORT ON CORPORATE SOCIAL RESPONSIBILITY (CSR) ACTIVITIES

| | | |
|---|---|---|
| 1. | A brief outline of the Company's CSR policy, including overview of projects or programs proposed to be undertaken and a reference to the web-link to the CSR policy and projects/programs | The Company is cognizant of its responsibility towards the society in which it operates and has been engaged in CSR activities directly through the establishment of skill development centre as well indirectly through contributions to AMM Foundation, an autonomous charitable trust, in the field of Education and Healthcare, in addition to pursuing activities for the benefit of community around its local areas of operations.<br><br>In line with its objectives and practices, the CSR policy focuses on Health, Education and Skill Development. The policy is uploaded in the website of the Company. |
| 2. | Website link where the CSR policy is uploaded | http://www.cumi-murugappa.com/policies.html |
| 3. | The composition of the CSR Committee# | Mr. Aroon Raman (Chairman)<br>Mr. P S Raghavan (Independent Director)<br>Mr. K Srinivasan (Managing Director)<br>#Mr. Shobhan Thakore was the Chairman of the Committee till 31st July 2017. Consequent to his term as an Independent Director ending on 31st July 2017, the Committee was re-constituted with the induction of two new members during the year on 9th May 2017. |
| 4. | Average net profit of the Company for last three financial years | ₹1265.54 million |
| 5. | Prescribed CSR Expenditure (two per cent of the amount as in item 4 above) | ₹25.31 million |
| 6. | Details of CSR spent during the financial year<br>(a) Total amount spent for the financial year<br>(b) Amount unspent, if any | <br>₹25.61 million<br>Nil |

(c) Manner in which the amount spent during the financial year is detailed below:

₹ million

| Sl.no | CSR Project or activity identified | Sector in which the project is covered | Project or Programs - location | Amount Outlay/direct by Co. | Amount spent on the projects or programs - 1) direct expenditure 2) overheads | Cumulative Expenditure upto reporting period | Amount spent Direct/agency |
|---|---|---|---|---|---|---|---|
| 1 | CUMI Centre for Skill Development | Enhancing employment skills in manufacturing sector | Hosur, Krishnagiri District, Cochin, Ernakulam District | 12.65 | 12.95 | 12.95 | Direct |
| 2. | Grant to Vellayan Chettiar Higher Secondary School (VCHSS) | Education | Tiruvottiyur, Chennai | 12.66 | 12.66 | 12.66 | Agency |
| | **Total** | | | **25.31** | **25.61** | | |

*Agency: AMM Foundation*

**With an objective to provide the students of the VCHSS adequate facilities for excelling in sports, the Company through the agency undertook a project during the year for development of playground (football ground) in addition to meeting the running expenditure of the school which is under execution.*

7. Reasons for shortfall in spend: NA
8. The implementation and monitoring of CSR Policy for the FY 2017-18 is in compliance with the CSR objectives and Policy of the Company.

On behalf of the Board

Chennai
May 4, 2018

**K Srinivasan**
*Managing Director*

**Aroon Raman**
*Chairman - CSR Committee*

# Annexure B
# Business Responsibility Report

## SECTION A: GENERAL INFORMATION ABOUT THE COMPANY

| | | |
|---|---|---|
| 1. | Corporate Identity Number (CIN) of the Company | L29224TN1954PLC000318 |
| 2. | Name of the Company | Carborundum Universal Limited |
| 3. | Registered address | 'Parry House' 43 Moore Street Chennai - 600001 |
| 4. | Website | www.cumi-murugappa.com |
| 5. | E-mail id | cumigeneral@cumi.murugappa.com |
| 6. | Financial Year reported | 1st April 2017 to 31st March 2018 |
| 7. | Sector(s) that the Company is engaged in (industrial activity code-wise) | |

| Group | Class | Sub-class | Description | Sector |
|---|---|---|---|---|
| 239 | 2399 | 23993 | Manufacture of other non-metallic mineral products | Abrasives |
| 239 | 2393 | 23939 | Manufacture of other porcelain and ceramic products | Ceramics |
| 007 | 0072 | 00729 | Mining of other non-ferrous metal ores | Electrominerals |

| | | |
|---|---|---|
| 8. | List three key products/services that the Company manufactures/provides (as in Balance Sheet) | Abrasives, Ceramics and Electrominerals |
| 9. | Total number of locations where business activity is undertaken by the Company | |
| | (a) Number of International Locations (Provide details of major 5) | On a standalone basis, the Company does not have any manufacturing unit located outside India |
| | (b) Number of National Locations | On a standalone basis, the Company carries manufacturing operations across 19 locations in India |
| 10. | Markets served by the Company | Local/State/National/International - All markets |

## SECTION B: FINANCIAL DETAILS OF THE COMPANY

| | | |
|---|---|---|
| 1. | Paid up Capital (INR) | ₹ 188.96 million |
| 2. | Total Turnover (INR) | ₹ 16333.19 million |
| 3. | Total Profit after taxes (INR) | ₹ 1434.79 million |
| 4. | Total Spending on Corporate Social Responsibility(CSR) as percentage of profit after tax (%) | 2.02% of the average net profits in the preceding three financial years. |
| 5. | List of activities in which expenditure in 4 above has been incurred | (a) Skill Development - Enhancing employment skills of under privileged youth in the manufacturing sector<br>(b) Education<br>For further details, please refer the Corporate Social Responsibility Report (Annexure A of Directors' Report) |

## SECTION C: OTHER DETAILS

| | | |
|---|---|---|
| 1. | Does the Company have any Subsidiary Company/ Companies? | Yes. As on 31st March 2018, the Company has 5 direct subsidiaries.<br>Its wholly owned subsidiary - CUMI International Limited has 7 subsidiaries.<br>Out of the total 12 subsidiaries, 3 are situated in India and 9 are situated outside India. |
| 2. | Do the Subsidiary Company/Companies participate in the BR Initiatives of the parent company? | Each subsidiary company carries out BR initiatives as per their local requirements. |
| 3. | Do any other entity/entities (e.g. suppliers, distributors etc.) that the Company does business with, participate in the BR initiatives of the Company? If yes, then indicate the percentage of such entity/entities? [Less than 30%, 30-60%, More than 60%] | The Company does business with reputed organisations who undertake BR initiatives as per their respective organisational policies.<br>The CUMI Centre for Skill Development, a direct CSR initiative of the Company, is joint collaboration with Wendt (India) Limited, joint venture company. |

## SECTION D: BR INFORMATION

### 1. Details of Director responsible for BR

#### (a) Details of the Director responsible for implementation of the BR policy/policies

| | | |
|---|---|---|
| 1. | DIN | 00088424 |
| 2. | Name | K Srinivasan |
| 3. | Designation | Managing Director |

#### (b) Details of the BR head

| No. | Particulars | Abrasives | Ceramics | Refractories & Prodorite* | Electrominerals |
|---|---|---|---|---|---|
| 1. | DIN | NA | NA | NA | NA |
| 2. | Name | N Ananthaseshan | Rajesh Khanna | R Rajagopalan | P S Jayan |
| 3. | Designation | President - Abrasives | President- Ceramics | EVP - Refractories & Prodorite | EVP - Electrominerals |
| 4. | Telephone number | 91-44-30006161 | | | |
| 5. | E-mail ID | cumibrr@cumi.murugappa.com | | | |

**Consequent to Mr. R Rajagopalan's retirement on 30th April 2018, the BR head for this division is Mr. V G Rajendran, Senior Vice President - Refractories and Prodorite.*

### 2. Principle-wise (as per NVGs) BR Policy/policies

#### (a) Details of compliance

| No. | Questions | P1 | P2 | P3 | P4 | P5 | P6 | P7 | P8 | P9 |
|---|---|---|---|---|---|---|---|---|---|---|
| i. | Do you have a policy/policies for | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| ii. | Has the policy been formulated in consultation with the relevant stakeholders? | The policy(ies) has been framed keeping in mind the interests of the stakeholders at large. | | | | | | | | |
| iii. | Does the policy conform to any national/international standards? | Various practises/processes emanating out of the policy(ies) conform to national/international standards. | | | | | | | | |
| iv. | Has the policy been approved by the Board? If yes, has it been signed by MD/owner/CEO/appropriate Board Director? | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| v. | Does the Company have a specified committee of the Board/ Director/Official to oversee the implementation of the policy? | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| vi. | Indicate the link for the policy to be viewed online? | https://www.cumi-murugappa.com/policies.html | | | | | | | | |
| vii. | Has the policy been formally communicated to all relevant internal and external stakeholders? | The policy(ies) has been disseminated on the Intranet as well as on the website of the Company. | | | | | | | | |
| viii. | Does the Company have in-house structure to implement the policy/policies? | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| ix. | Does the Company have a grievance redressal mechanism related to the policy/policies to address stakeholders' grievances related to the policy/ policies? | The individual policies by and large prescribe a grievance redressal mechanism for the stakeholders concerned. Wherever, the individual policies do not explicitly state the grievance redressal mechanism, grievances can be addressed to cumibrr@cumi.murugappa.com. | | | | | | | | |
| x. | Has the Company carried out independent audit/evaluation of the working of this policy by an internal or external agency? | The Internal Auditors of the Company review the implementation of policies from time to time. The Company's various factories have been subject to audit by external certification agencies. No dedicated Business Responsibility audit has been conducted. | | | | | | | | |

#### (b) If answer to the question at serial number 2(a)(i) against any principle is 'No', please explain why: Not applicable

| No. | Questions | P1 | P2 | P3 | P4 | P5 | P6 | P7 | P8 | P9 |
|---|---|---|---|---|---|---|---|---|---|---|
| i. | The Company has not understood the Principles | Not applicable | | | | | | | | |
| ii. | The Company is not at a stage where it finds itself in a position to formulate and implement the policies on specified principles | | | | | | | | | |
| iii. | The Company does not have financial or manpower resources available for the task | | | | | | | | | |
| iv. | It is planned to be done within next 6 months | | | | | | | | | |
| v. | It is planned to be done within the next 1 year | | | | | | | | | |
| vi. | Any other reason (please specify) | | | | | | | | | |

### 3. Governance related to BR

**i. Indicate the frequency with which the Board of Directors, Committee of the Board or CEO assess the BR performance of the Company. Within 3 months, 3-6 months, annually, more than 1 year.**

The assessment is a continuous process and there is no defined frequency at which this assessment is done.

**ii. Does the Company publish a BR or a Sustainability Report? What is the hyperlink for viewing this report? How frequently it is published?**

The Company publishes BR report annually and the report is available at *https://www.cumi-murugappa.com/policies.html.*

## SECTION E: PRINCIPLE-WISE PERFORMANCE

### Principle 1: Businesses should conduct and govern themselves with ethics, transparency and accountability.

**1. Does the policy relating to ethics, bribery and corruption cover only the Company? Yes/No. Does it extend to the group/ joint ventures/ suppliers/ contractors/ NGOs/ others?**

Commitment to ethical and lawful business conduct is a fundamental shared value of the Board of Directors, Senior Management and all other employees of the Company. CUMI's value systems are aligned with the Murugappa Group's Values and Beliefs guided by the Five Lights - spirit of the Murugappa Group: Integrity, Quality, Passion, Respect and Responsibility towards all stakeholders and the communities that the Company operates in and serves. The Company as well as all companies within the CUMI Group - its subsidiaries, associates or joint ventures are governed by this philosophy as well as the requirements of their local jurisdictions.

CUMI's Right path - a corporate manual setting out the corporate culture lays down the guidelines required to be adhered to by every employee both in letter and spirit. This manual prepared with a view to give clarity on ethical issues, maintaining transparency in all dealings and practice ethics in a dynamic business environment is required to be adhered by all employees. The Company's Code of Conduct, Code of Conduct for Prevention of Insider Trading, Diversity policy, Policy on prevention of sexual harassment, ethical guidelines on stakeholder dealing, Whistle Blower policy which are also enshrined in the Right Path serve as a guiding norm in matters relating to ethics, anti-bribery and anti-corruption for all employees.

The Company has a policy to do business with suppliers/ contractors and others who are aligned with its value systems. Appropriate due diligence is exercised while selecting them. While last year the Company was conferred the prestigious Golden Peacock Award in Corporate Ethics, this year the Company has been awarded the Golden Peacock Award for Corporate Governance in due recognition of its governance practises.

**2. How many stakeholder complaints have been received in the past financial year and what percentage was satisfactorily resolved by the management?**

During the year, there was one referral made under the Whistle Blower policy of the Company. No complaint was referred under the BRR grievance redressal mechanism. The referral made was investigated and closed satisfactorily.

### Principle 2: Businesses should provide goods and services that are safe and contribute to sustainability throughout their life cycle.

The Company undertakes to assure safety and optimal resource use over the life-cycle of its products. The Company being material science technology oriented continuously innovates and strives for optimal resource use over the life cycle of the products it manufactures.

**1. List up to 3 of your products or services whose design has incorporated social or environmental concerns, risks and/or opportunities:**

**Abrasives:**

- Metal working fluids manufactured by the Abrasives segment are water solubles designed for easier effluent treatment, thereby having a low negative impact on environment.
- 'Fero' Grinding Wheel, developed with a fiber reinforced core can be re-cycled subsequent to use. This not only helps in keeping the costs under control, but also assists in reducing the carbon footprint.

**Electrominerals:**

- Two modern fusion facilities have been introduced to improve particulate emission control system.
- Azure S - Improvements in the Selective Catalytic Reduction systems to avoid scrubbing process. A new product SiC fine powder is developed which is used as a part of emission control from Diesel vehicles.

**Industrial Ceramics:**

- Technical Ceramics - Furniture for Solid Oxide fuel cells - used in alternate mode of power generation for green energy equipment.

The Company has dedicated state of the art Research and Development centres across its businesses certified by the Department of Scientific and Industrial Research (DSIR) serving as centres of excellence for research and strengthening the platform for competency & sustainable growth.

**2. For each such product, provide the following details in respect of resource use (energy, water, raw material etc.) per unit of product (optional):**

**a. Reduction during sourcing/production/distribution achieved since the previous year throughout the value chain?**

- Significant part (~30 per cent) of the energy requirement for the Electrominerals division - the major user of electric energy is from our own Hydro power station - green energy.
- Almost entire power requirement in Tamil Nadu is met by SEDCO - our own gas based power station - clean power.
- Kilns and processes are designed to consume low energy per unit of production. This is managed by programs impacting both the primary and secondary energy consumption points through EnMS.
- SPC (Specific Power Consumption) & SFC (Specific Fuel Consumption) programmes are driven using TPM methodologies.
- The Company has assisted in TPM and 5S implementation at the suppliers' end to improve material yields and reduce energy consumption.
- A new backing treatment process has been developed and implemented by the Coated Abrasives manufacturing plant which is expected to save one million liters of water per month.
- The Industrial Ceramics Division has installed a high capacity Effluent Treatment plant with which the permeate recovery from RO plant can be improved up to 85%. Using this RO permeate, about 18KL/Day water has been recycled.
- The Company uses a cleaner gaseous fuel (LPG) in Metallized Cylinder manufacturing line. Combustion efficiency of gas firing is higher when compared to that of gas fuels. Further, the thermal mass of refractories in these furnaces is reduced to enable a faster firing cycle and thereby reducing the peak temperature of firing by 5 per cent. This has helped in minimising the energy consumption to extent of 20 per cent when compared to that liquid fuels and long firing cycle.
- The Electrominerals Division has set up a bio-waste treatment system for canteen wastes.
- We are a zero discharge Company in almost all locations.

As the Company's product range is over 20,000 SKUs, unit consumption is not an appropriate measure.

**b. Reduction during usage by consumers (energy, water) has been achieved since the previous year?**

- We have been continuously developing superior Grinding wheels that are more efficient in material removal resulting in lower power consumption by user entities.
- We develop superior Grains that have higher material removal per unit energy.
- The 'Fero' Grinding Wheels, developed with a fibre reinforced core, has achieved reduction of wheel weight to the tune of 20 per cent, capable of higher speeds and thereby reducing the power consumption.

**3. Does the Company have procedures in place for sustainable sourcing (including transportation)? If yes, what percentage of your inputs was sourced sustainably?**

The Company's integrated operations ensures sustainable exploitation of the available resources. Joint project opportunities amongst various business units improve efficiencies in sourcing besides resulting in product efficiencies.

Conscious efforts are made to ensure that everyone connected with the Company be it the designers, producers, value chain members, customers and recyclers are made aware of their responsibilities.

The Total Productivity Maintenance (TPM) practices across plants helps in not only achieving operational efficiencies but also results in energy conservation and sustainable operations. Usage of materials which are either recycled or capable of recycling assumes top priority. During the year, the Coated Abrasives Division, Sriperumbudur Plant received the JIPM Award for Excellence in Consistent TPM commitment. The JIPM Award for TPM Excellence, Category A was received by the Bonded Abrasives Division, Hosur Plant. Again JIPM Award for Excellence in Consistent TPM commitment was received by the Maraimalai Nagar Abrasives Plant and the Industrial Ceramics Division, Hosur received the JIPM Award for TPM Excellence, Category A. The recognition for TPM practises across various plants resonates with our focus for sustainable operations across the organisation.

**4. Has the Company taken any steps to procure goods and services from local & small producers, including communities surrounding their place of work? If yes, what steps have been taken to improve the capacity and capability of local and small vendors?**

The Company's global and complex operations does not complement the procurement of goods and services from local and small producers in its location of manufacturing operations. However, the Company interacts with the local & small producers at regular intervals on the business and quality requirements. Assured volumes instils confidence in them to supply quality products by adopting sustainable and safe practices. The Company from time to time provides training and guidance on optimum use of resources, thereby saving cost and time. This has resulted in the small producers manufacturing products which are benchmarks in quality, thereby gaining an edge over the market.

**5. Does the Company have a mechanism to recycle products and waste? If yes what is the percentage of recycling of products and waste (separately as <5%, 5-10%, >10%)?**

Duly recognising that over-consumption results in unsustainable exploitation of the planet's resources, the business units in the Company are committed to promoting sustainable consumption, including recycling of resources.

The Company has sustainable processes in place to recycle the products and waste, post completion of the manufacturing life cycle.

The Company has an integrated value cycle mapping process. For example: the setters (a process consumable) used in the Ceramic plant(s) is post usage sent to the Refractory plant(s) for use in Castable manufacture.

All process wastes of the Coated Abrasive plant(s) are treated and the recovered Grains are used in Refractory nufacture. The treated main waste is in the form of skeleton waste from jumbos. More than 50% of the gross loss from this waste is recovered in the form of marketable products. Further, the loss of grains in green form is completely recovered.

The Industrial Ceramics Division has created an in-house facility for making wooden pallets from scrap wood instead of fresh procurement of wood thus leading to saving in consumption of plywood and timber.

In the Electrominerals Division, the byproducts/semi-converted materials of major products is being recycled completely.

## Principle 3: Businesses should promote the well-being of all employees.

Any organisation is as good as the people who work for it. The trusting and caring ecosystem allows the Company to nurture a workforce that works passionately in tandem with its core values.

The Company is committed to providing equal opportunities both at the time of recruitment as well as during the course of employment irrespective of caste, creed, gender, race, religion, disability etc. The Company strives to keep the workplace environment safe, hygienic, humane, upholding the dignity of the employees including conducting trainings and sending suitable communications on regular basis. The Company's strategic pillars for capability talent development, propelling performance and other dedicated HR initiatives continue to facilitate constant upgradation of the skill and competency of the employees.

CUMind, a customised innovation framework was launched last year enabling entrepreneurial minds to conceive, design and deliver new products, businesses, processes etc. to ensure the operations remain relevant and sustainable.

To enhance technical know-how, sponsorship support is extended in Bachelors/Masters programmes in technology. The dedicated learning and development programmes enhance the right skill sets and relevant knowledge to employees to achieve operational and futuristic benefits. The learning solutions are designed as per the training need analysis. Proactive steps and structured problem solving mechanisms with focus on people issues and periodical communication on business related issues ensure cordial industrial relations.

Providing and maintaining a safe and hygiene working environment is a continuous process at CUMI. Periodic awareness sessions, training on usage of protective equipments, identifying and eliminating unsafe conditions are given top priority. Most of our plants are BS-OHSAS 18001-2007 certified for occupational health and safety management systems. The Company continues its commitment to employ and empower women and its initiatives such as friendly work place policies for women, policy for prevention of sexual harassment, redressal mechanism in the form of Internal Complaints Committee, women welfare Committees etc. augurs well.

1. **Total number of employees:** The number of employees as on 31st March 2018 (including Non-Management staff) was 2071.
2. **Total number of employees hired on temporary/ contractual/ casual basis:** 2830
3. **Number of permanent women employees:** 73
4. **Number of permanent employees with disabilities:** 7
5. **Do you have an employee association that is recognized by Management?**

   Yes. There are recognised trade unions affiliated to various trade union bodies.
6. **What percentage of your permanent employees are members of this recognised employee association?**

   About 55 per cent of the employees are members of recognized employee associations.
7. **Number of complaints relating to child labour, forced labour, involuntary labour, sexual harassment in the last financial year and pending, as on the end of the financial year.**

| No. | Category | No. of complaints filed during the financial year | No. of complaint pending as on end of financial year |
|---|---|---|---|
| 1. | Child labour/forced labour/involuntary labour | Nil | Nil |
| 2. | Sexual harassment | Nil | Nil |
| 3. | Discriminatory employment | Nil | Nil |

8. **What percentage of your under mentioned employees were given safety & skill up-gradation training in the last year?**

| No. | Category of employees | Safety Training | Skill upgradation |
|---|---|---|---|
| 1. | Permanent Employees | 94% | 94% |
| 2. | Permanent Women Employees | 100% | 85% |
| 3. | Casual/Temporary/Contractual Employees | 90% | 72% |
| 4. | Employees with Disabilities | 100% | 70% |

## Principle 4: Businesses should respect the interests of, and be responsive towards all stakeholders, especially those who are disadvantaged, vulnerable and marginalised

1. **Has the Company mapped its internal and external stakeholders?**

   Yes. The Company has identified its internal and external stakeholders.

2. **Out of the above, has the Company identified the disadvantaged, vulnerable & marginalised stakeholders?**

   The Company's Corporate Social Responsibility (CSR) policy drives the initiatives undertaken by the Company towards the benefit of the disadvantaged, vulnerable and marginalised stakeholders. The systems and process in place to systematically identify stakeholders and for understanding their concerns and for engaging with them is reviewed from time to time. The feedback mechanism available for shareholders and customers to assess the services levels and other complaints follows the spirit laid down herein.

3. **Are there any special initiatives taken by the Company to engage with the disadvantaged, vulnerable and marginalised stakeholders?**

   The Company on a periodical basis undertakes dedicated activities as a part of its CSR initiatives for the disadvantaged, vulnerable and marginalised stakeholders in and around the Company's factories/plants. Education, sports and health aids are provided to schools in rural/under-developed areas and to schools supporting differently abled children. The Company acknowledges the importance of skill development in this competitive environment and has set up the CUMI Centre for Skill Development (CCSD) with the motto of 'Honing Skills Helping Life' at Hosur & Cochin and plans to gradually replicate this model to its other locations. The CCSD has been set up to build a skill bank of a technically competent and industry ready work force by providing specialised training based on National Council Vocational Training syllabus for the rural youth drawn from socially and economically backward sections of the society. The Company also pursues other local community assistance programmes in and around its plant and office locations.

## Principle 5: Businesses should respect and promote human rights.

1. **Does the policy of the Company on human rights cover only the Company or extend to the group/joint ventures/ suppliers/ contractors/NGOs/others?**

   The Company's policy on human rights is imbibed in its values represented in the Five Lights guiding the Company, its group companies and their employees across all spheres. The alignment with this value system is expected out of any person dealing with the Company.

2. **How many stakeholder complaints have been received in the past financial year and what per cent was satisfactorily resolved by the Management?** Nil under this principle.

## Principle 6: Business should respect, protect, and make efforts to restore the environment.

1. **Does the policy related to Principle 6 cover only the Company or extends to the group/joint ventures/ suppliers/contractors/ NGOs/others?**

   Safeguarding and protecting the environment is a shared value of the Company and its subsidiaries, joint ventures and associates. However, these companies have their own Safety, Health and Environment policies depending on the nature of their business and the local regulatory requirements. The Company's suppliers and contractors would be governed by their respective policies. The Company exercises due diligence in the selection of suppliers/ contractors/others who are aligned with its value system.

2. **Does the Company have strategies/ initiatives to address global environmental issues such as climate change, global warming, etc.?**

   Being in the manufacturing business, the Company has mechanisms in place to ensure compliance with the applicable environmental laws. The Company is committed to be an environment friendly organisation and has a dedicated Environmental Policy across all its business units. The Company is an active player in practising initiatives to address environmental issues and ensuring sustainable development. Almost all the locations of the Company have received the ISO 14001 certificate for their Environment Management Systems and ISO 9001 for Quality Management Systems. Most of the plants are seen as Model Plants with Zero Discharge and Zero Emission. Further, the Risk Management framework covering the Environmental risks is reviewed on a periodical basis and the steps that are required to be taken for mitigating the related risks are analysed and implemented.

   The Company also recognises the significance of a greener belt by virtue of which a number of saplings are planted on a yearly basis to reduce the carbon footprint.

3. **Does the Company identify and assess potential environmental risks?**

   Yes. Identification of potential environmental risks and the mitigation plan thereon is a continuous process. A report of the same is also placed before the Risk Management Committee of the Board of Directors on a periodical basis. Further, the Company also ensures that the effluent/ emissions are within the permissible limits as prescribed by the statutory authorities.

4. **Does the Company have any project related to Clean Development Mechanism?**

   No, the Company has not undertaken any specific project related to the Clean Development Mechanism as per the Kyoto Protocol. However, all the manufacturing locations of the Company are certified ISO 14001 (Environment Management System), QMS - ISO 9001 (Quality Management System), OHSAS - 18001. Most of the plants are also certified with the EnMS ISO 5001:2011.

5. **Has the Company undertaken any other initiatives on - clean technology, energy efficiency, renewable energy, etc.?**

   The Company utilises its resources in an optimal and responsible manner ensuring sustainability through reduction, re-use, re-cycling and managing waste. Appropriate measures to check and prevent pollution are undertaken and wherever required assessment of environmental consequences, if any, is taken up with due regard to public interest. Equitable sharing of access and commercialization of biological and other natural resources and associated traditional knowledge is encouraged. The Company seeks to improve its environmental performance by adopting cleaner production methods, promotion of energy efficient and environmental friendly technologies. Suitable processes and systems are developed with contingency plans and processes that help in preventing, mitigating and controlling environmental damages caused due to the Company's operations.

The Company partners with global leaders in the space of Solar (photovoltaic) energy, Clean coal, SOFC (solid oxide fuel cells), windmills and VLBS (Very large scale Battery storage). We co-create products for these companies/ industries. Finer details on product/ solutions cannot be provided due to contractual obligations.

For more details on the energy conservation initiatives - please refer Annexure C of the Directors' report for the FY 2017-18.

**6. Are the emissions/waste generated by the Company within the permissible limits given by CPCB/SPCB for the financial year being reported?**

Yes, the Company being in manufacturing business, at all times ensures compliance with the applicable environmental laws. The Environment Policy of the Company and the ISO-14001 certification of its facilities reiterates its commitment to be an environment friendly organization setting standards in environment management.

**7. Number of show cause/legal notices received from CPCB/SPCB which are pending (i.e. not resolved to satisfaction) as on end of financial year:** Nil

### Principle 7: Businesses, when engaged in influencing public and regulatory policy, should do so in a responsible manner.

**1. Is your Company a member of any trade and chamber or association?** Yes

a. Confederation of Indian Industry
b. Indian Ceramic Society
c. Indian Refractory Manufacturers Association
d. Kerala High Tension and Extra High Tension Industrial Electricity Consumers' Association
e. Kerala Management Association
f. MMA
g. Employers Federation of India
h. South India Chamber of Commerce
i. SIGMA - Europe
j. Lucideon in UK

**2. Have you advocated/lobbied through above associations for the advancement or improvement of public good?**

The Company is not actively involved in lobbying. However, as a responsible corporate citizen, the Company as a part of industry associations/chambers makes recommendations/ representations before regulators and associations for advancement and improvement of the industrial climate in India. The Company also represents its views/opinions on energy security & management, water, food security and sustainable business principles through various forums.

### Principle 8: Businesses should support inclusive growth and equitable development.

**1. Does the Company have specified programmes/ initiatives/ projects in pursuit of the policy related to Principle 8?**

The Company upholds the Murugappa Group's tradition by earmarking a part of its income for carrying out its social responsibilities, even before the mandatory CSR provisions under the Companies Act, 2013 were notified. The Company believes that social responsibility is not just a corporate obligation that has to be carried out but it is one's dharma. Therefore, our philanthropic endeavours are a reflection of our spiritual conscience and this provides us a way to discharge our responsibilities to the various sections of the society.

The CSR Committee, constituted for implementation of the well-defined CSR policy laid out by the Company, reviews the spend to be made and the projects for which such funds need to be allocated. The CSR policy highlights the responsibility statement of the Company towards CSR, the principles guiding the initiative, the manner of implementation and the reporting thereof. Skill Development, education and health care are the priority focus areas for the CSR initiatives of the Company.

The Company set up the CUMI Centre for Skill Development (CCSD) in year 2012 at Hosur, to build a skill bank of a technically competent and industry ready work force. During the year 2015-16, the Company replicated this model in Edapally, Cochin. The Centre provides specialised training based on National Council Vocational Training syllabus for the rural youth drawn from socially and underprivileged sections of the society. The three year training is imparted with a stipendiary payment and free boarding facilities, thus enabling the enrolled students to earn while they learn. The job oriented skill training enhances their employability and aids in uplifting their socioeconomic status. The technically trained students can be employed by any industrial entity once they complete the training programme. Running its $5^{th}$ year of operation, the CUMI Centre for Skill Development (CCSD) believes in providing the right environment to candidates who emerge from deprived backgrounds and hone their skills to meet the future skill challenges of the world and not just for organisational purposes. Strategically located at Hosur (as well as in Cochin) connecting the borders of Karnataka, Tamil Nadu and Andhra Pradesh, the centre aims at attracting a diverse population also focusing specially on girl children as a healthy mix in each batch of students. During the year 2017-18, 34 new students were inducted into CCSD.

A portion of the CSR spend is also allocated for projects in the field of education/healthcare through implementing agency. The Company makes contributions to the Vellayan Chettiar Higher Secondary School (VCHSS), Tiruvottiyur, which has been making a difference in the field of education for the past 50 years. Tiruvottiyur being an area dominated by the fisher folk, most of the students in VCHSS belong to this community. With about 3000 students, this Government aided school provides quality education to the marginalised. The school runs with the vision - To provide Quality Education with good virtues, for the under privileged. The school caters to the students from the marginalised communities around Tiruvottiyur. The educational qualification of the parents is maximum limited to schooling. Most families also face socioeconomic difficulties due to problems like alcoholism resulting in health issues, desertion by families etc. More than 250 students from the school receive educational assistance through the Touch a life scheme. Almost all the students benefiting from this scheme belong to single parent family. With the amounts funded through CSR, this school is now equipped with laboratories for Physics, Chemistry, Botany, Microbiology & Zoology, a Computer Centre and a General Science Lab for high school and middle school sections to facilitate experiential learning among the students. With an objective to provide the less privileged students adequate facilities for excelling in sports such as athletics/football, the Company through AMM Foundation is developing a playground for the students of VCHSS in addition to meeting the running expenditure of the School.

2. **Are the programmes/projects undertaken through in-house team/own foundation/external NGO/government structures/ any other organization?**

   The Corporate Social Responsibility initiatives of the Company are implemented through an in-house team as well as through implementing agency - AMM Foundation which is an autonomous charitable trust.

3. **Have you done any impact assessment of your initiative?**

   Replicating the CCSD model of Hosur in Cochin is a result of the impact assessment conducted by the Company. The additional CSR initiative during the year in the form of playground for the school is resultant of the impact assessment undertaken in that area.

4. **What is your Company's direct contribution to community development projects?**

   Please refer the CSR report in Annexure A of the Directors' report for the FY 2017-18 for complete details on the spend made by the Company during the financial year ended 31st March 2018.

5. **Have you taken steps to ensure that this community development initiative is successfully adopted by the community?**

   The Company's dedicated CCSD team operating at Hosur and Cochin constantly engages with the NGO's, residential associations etc. in and around the factories to understand and identify the deserving candidates from various backgrounds. Further, the students enrolled with CCSD along with their parents meet the executives of the centre on a monthly basis along with the residential association representatives and discuss on the positives that have been achieved through the programme. A two way flow of feedback - one from the Centre regarding the student's performance and another from the parent's end ensures that the student's development is taken utmost care of. Further, the representatives of the self-help groups, who also participate in the meeting, give their opinion on any other development programmes that can be initiated for the betterment of the students. The students enrolled at the centre are also highlighted the importance of being a responsible citizen; they regulate traffic at important junctions, initiate 5S, Cleanliness Drives from their hostel rooms to external environment. The confidence and the professional conduct shown by the students is an acknowledgement to the Company of its successful implementation of the CCSD initiative.

   The indirect programmes for assisting communities in and around plant locations has also positively impacted & influenced those in the nearby communities.

## Principle 9: Businesses should engage with and provide value to their customers and consumers in a responsible manner.

1. **What percentage of customer complaints/consumer cases are pending as on the end of financial year?**

   The total number of customer complaints across all businesses which were pending at the end of the year constitutes less than 5 per cent which have been subsequently resolved.

2. **Does the Company display product information on the product label, over and above what is mandated as per local laws?**

   Yes. Wherever relevant, the Company encourages that its packaging/ labelling contain detailed information regarding safe handling, storage and use, which is over and above what is mandated as per local laws.

3. **Is there any case filed by any stakeholder against the Company regarding unfair trade practices, irresponsible advertising and/ or anti-competitive behaviour during the last five years and pending as on end of financial year:** None

4. **Did your Company carry out any consumer survey/consumer satisfaction trends?**

   Yes. The Company on a periodical basis conducts various consumer survey/satisfaction trends. The Company put its customers at the fulcrum of its business strategy. The Company understands their requirements and provides them holistic solutions rather than merely supplying materials.

   The Company collaborates meaningfully with its customers for co-creating sustainable products and solutions. Dedicated customer/ dealer meetings, customer plant visits, transparent and compliant product labelling ensures awareness creation for the product usage and safe disposal. Customer visits are not necessarily confined to their product needs but also extends to sharing of best practices like TQM, TPM etc. It is also worthy to note that a significant portion of the Company's business pertains to offering customised products. Hence, customer's requirements rank very high to the Company.

The Business Responsibility Policy of the Company governing its business sustainability efforts is available on the Company's website *www.cumi-murugappa.com.*

On behalf of the Board

Chennai
May 4, 2018

**M M Murugappan**
*Chairman*

# ANNEXURE C

## I. ENERGY CONSERVATION

All business divisions of the Company pursued energy conservation efforts relentlessly during the year. The energy conservation measures undertaken during the year were in the nature of identifying and optimising the power consumption in various power intensive equipments, modifying the manufacturing process, replacing with efficient energy conserving equipments, enhancing cycle time and sourcing of alternate fuels.

Dust collectors, fans and other consumer appliances were replaced with energy efficient products. LED lightings and boiler flue gas excess air control were installed. Material lifts were modernised. Installation of variable frequency drive for kilns, circulation fans, hot air blowers, induction lamp were some of the activities that were carried out towards conservation of energy.

Graphite electrode, which is used as a consumable in electric arc fusion process, has seen a sharp rise in its prices during the year. In order to mitigate this significant cost push arising out of galloping graphite electrode price, the Company successfully established a new fusion process, which enabled substantially lesser consumption of graphite electrode coupled with reduction in power consumption.

The above energy saving measures implemented across divisions considerably benefitted the Company. Further, energy savings was achieved by prudent sourcing of power from exchanges.

During the year ended 31st March 2018, a capital investment of around ₹26 million was made on energy conservation equipments across the various SBUs.

## II. TECHNOLOGY ABSORPTION

### Efforts made towards technology absorption, adaptation and innovation

In line with the overall divisional strategy, development of high performance, innovative and exciting products was the main focus during the year 2017-18.

Joint programs with various vendors and other divisions were initiated to improve capability and costs. New resins, new vitrified bond systems, grinding aids and new processes were used to develop a range of high performance products that offered growth in respective product groups. Key new Bonded Abrasives products launched in the market were Micro grit grinding wheels, improved Ball Lapping wheels, Gear grinding wheels, Ceramic grain based thread, Flute grinding wheels and F-type wheels. In the Coated Abrasives range high-performance Zirconia Belts were developed. These products were successfully established in Indian Market and in specific global markets. The business worked on developing solutions for auto-after, car door frame and Crank and Cam grinding applications with a focus on creating a full basket of products for its distributors and end users. Light weight grinding wheels with resilient core that would draw lesser power were established as a concept.

The Ceramics business worked on a collaborative research for Tape casting process and Metallization process on Alumina substrates. Electromineral division focussed on developing cost effective process for monoclinic zirconia and sintered mulite, establishing ready to press powders and developing high performance low cost product Z450.

### Benefits derived as a result of the above efforts:

The Company could establish improved range of Coated Abrasives products and Resin bonded grinding wheels with hi performance binders. High performance range of Non-woven products were introduced. New range of low temperature fired Vitrified wheels for precision grinding were presented to target markets.

The Refractory business could establish cutting edge products for Ceramics, Iron and Steel and Carbon Black industry. The industrial ceramics vertical could successfully launch Zirconia based Ceramic product for various markets. Electromineral business could develop raw material security for value added products, identify and develop market for co-generated by-product and create value in the by-products.

### Imported technology:

No new technology was imported during the year. The details of the technology imported in the last three years reckoned from the start of FY 2017-18 are:

| Technology imported | Roll Grinding wheel |
|---|---|
| Year of import | 2014-15 |
| Has technology been fully absorbed | Yes |
| If not fully absorbed, areas where this has not taken place, reasons thereof and future plans of action | - |

## III. EXPENDITURE ON RESEARCH AND DEVELOPMENT

The Company has set up several DSIR (Department of Science and Industrial Research) approved Research and Development (R&D) centres at all its divisions. Across the CUMI group of companies, there was continuous focus on technology innovations including creation of several IPs in form of patent/design/trademark registrations, peer review paper presentations in international forums and journals. The Company was instrumental in generating over 45 IPs in form of patent/design/trademark registrations during the year.

R&D efforts during the year continued to focus on new product/ applications development. The Abrasives business was able to successfully establish products for aerospace industry. Range of Coated products and Resin Bonded Grinding wheels were expanded with Hi-performance binders. Range of Non-Woven products with improved structure and stable dimensions were successfully launched. R&D activities were also carried out in Refractory division for Iron and Steel, Cement, Foundry and Petrochemical industries. Electrominerals division worked towards development of own raw material in line with the backward integration strategy, imparting surface modification properties in specific applications like Coated and Bonded Abrasives. R&D centres continued to work for the future products to address the changing business environment - Light weighing, surface conditioning, combination backings etc.

### EXPENDITURE ON R & D

₹ million

| Description | 2017-18 |
|---|---|
| Capital including CWIP | 26.56 |
| Recurring | 131.76 |
| Total - A | 158.32 |
| Sales - B (excluding excise duty) | 15513.76 |
| Total expenditure as a percentage of Sales | 1.02% |

### IV. FOREIGN EXCHANGE EARNINGS AND OUTGO

₹ million

| Particulars | 2016-17 | 2017-18 |
|---|---|---|
| Foreign Exchange Earnings | 3140 | 3571 |
| Foreign Exchange Outgo | | |
| - Revenue | 2960 | 3427 |
| - Capital | 425 | 141 |

Chennai
May 4, 2018

On behalf of the Board
**M M Murugappan**
*Chairman*

## ANNEXURE D

### STATEMENT OF EMPLOYEES' REMUNERATION

**I. The details of top ten employees in terms of remuneration drawn during the financial year 2017-18 as per Rule 5(2) of the Companies (Appointment and Remuneration of Managerial Personnel) Rules, 2014 duly amended by the Companies (Appointment and Remuneration of Managerial Personnel) Amendment Rules, 2016 are as follows:**

| Name and Age | Designation/Nature of duties | Gross remuneration paid (₹) | Qualification & experience (years) | Date of commencement of employment | Previous employment |
|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 |
| Srinivasan K (60) | Managing Director | 22,226,368 | B Tech (Mech) (38) | 30.01.2002 | Vice President - Wendt (India) Limited |
| Ananthaseshan N (55) | President, Abrasives | 11,338,615 | M.Sc (Applied Science), M.Tech Material Science (32) | 19.02.1986[e] | - |
| Sridharan Rangarajan (52) | President, Corporate | 10,508,421 | B Com, ACA, Grad CWA (32) | 22.06.2011 | CFO, Indian Operations - TIMKEN |
| M Muthiah (58) | Executive Vice President, Human Resources | 9,022,889 | MA (SW) and PG Dip in Management (34) | 15.10.2003 | Plant HR Head-Hyundai Motor India Limited |
| Rajagopalan R (60) | Executive Vice President, Refractories & Prodorite | 7,768,052 | B E (Mech), MBA (Oubs) (38) | 01.10.1980[e] | - |
| Shyam S Rao (55) | Senior Vice President, Industrial Ceramics Division | 7,032,397 | B.Tech Metallurgy, MS Material Science, PhD Material Science (24) | 07.05.1999 | Widia India Limited |
| Jayan P S (58) | Executive Vice President, EMD | 5,631,725 | B.Sc & B.Tech (30) | 30.05.1987[e] | - |
| Srikanth C (52) | Senior Vice President, Marketing - Abrasives | 5,183,682 | BE Mechanical Engineering & MBA Marketing (31) | 05.09.1992 | Cutfast Abrasives Tools Limited |
| Vijayalakshmi D (52) | Senior Associate Vice President, Corporate Communications | 4,518,803 | B.Sc Physics (30) | 21.01.2010 | Ogilvy Public Relations Worldwide |
| Ramesh Kalyanaraman (49) | Senior Associate Vice President, Technology - Abrasives | 4,421,565 | M.Tech (27) | 06.07.1991[e] | - |

**Notes:**

(a) Remuneration shown above includes salary, allowances, Company's contribution to provident, superannuation and gratuity funds, medical facilities and perquisites valued as per income tax rules. During the year, no Options were granted under the Employees Stock Option Scheme, 2007. However, during the year eligible employees were granted in aggregate 70,214 Options under the Employees Stock Option Plan, 2016. The employee wise grant details are available in the disclosure under SEBI (Share Based Employee Benefits) Regulations, 2015 uploaded in the website of the Company. The Employee Stock Options granted to employees in the earlier period are accounted based on fair value as per Indian Accounting standards.

(b) The employment of the above persons is whole-time in nature and terminable with 3 months notice on either side. Effective 18th January 2018, Mr. Sridharan Rangarajan has been deputed to Murugappa Management Services Limited.

(c) Mr. K Srinivasan was re-appointed as the Managing Director by the Board from 23rd November 2017 till 22nd November 2019 with the approval of shareholders at the 63rd Annual General Meeting. He is subject to the service conditions of the Company.

(d) The above mentioned employees are not relatives (in terms of the Companies Act, 2013) of any Director of the Company. Further, no employee of the Company is covered by the Rule 5(2)(iii) of the Companies (Appointment and Remuneration of Managerial Personnel) Rules, 2014 (employee holding by himself or with his family shares of 2% or more in the Company and drawing remuneration in excess of the Managing Director). Hence, the details required under Rule 5(3) (viii) is not applicable.

(e) Date of joining as graduate engineer trainee.

(f) The remuneration details are for the financial year 2017-18 and all other particulars are as on 31st March 2018.

(g) None of the employees of the Company other than Mr. K Srinivasan, Managing Director, Mr. Ananthaseshan N, President - Abrasives, Mr. Sridharan Rangarajan, President - Corporate (on deputation) were in receipt of remuneration for the FY 2017-18 in excess of Rupees one crore and two lakh Rupees per year or eight lakh and fifty thousand Rupees per month.

## II. The details of remuneration during the year 2017-18 as per Rule 5(1) of the Companies (Appointment and Remuneration of Managerial Personnel) Rules, 2014 as amended by the Companies (Appointment and Remuneration of Managerial Personnel) Amendment Rules, 2016 as are as follows:

(i) Ratio of remuneration of each Director to the median remuneration of the employees of the Company for the financial year:

| Name | Designation | Ratio |
|---|---|---|
| Mr. M M Murugappan | Chairman | 21.15 |
| Mr. T L Palani Kumar | Independent Director | 2.22 |
| Mr. Sanjay Jayavarthanavelu | Independent Director | 1.95 |
| Mr. Aroon Raman | Independent Director | 1.97 |
| Mrs. Bharati Rao | Independent Director | 1.92 |
| Mr. M A M Arunachalam | Non-Executive Director | 1.96 |
| Mr. P S Raghavan* | Independent Director | 1.74 |
| Mr. Sujjain S Talwar* | Independent Director | 1.91 |
| Mr. K Srinivasan | Managing Director | 46.05 |

* Appointed as an Independent Director w.e.f. 9th May 2017.

(ii) Percentage increase in the remuneration of each Director, Chief Executive Officer, Chief Financial Officer, Company Secretary in the financial year:

| Name | Designation | Increase (%) |
|---|---|---|
| Mr. M M Murugappan | Chairman | 0.25 |
| Mr. T L Palani Kumar | Independent Director | 0.94 |
| Mr. Aroon Raman | Independent Director | 9.83 |
| Mr. Sanjay Jayavarthanavelu | Independent Director | (1.05) |
| Mrs. Bharati Rao | Independent Director | (2.63) |
| Mr. M A M Arunachalam** | Non-Executive Director | NA |
| Mr. P S Raghavan* | Independent Director | NA |
| Mr. Sujjain S Talwar* | Independent Director | NA |
| Mr. K Srinivasan | Managing Director | 11.94 |
| Ms. Rekha Surendhiran | Company Secretary | 14.07 |

*Joined the Board during 2017-18, hence not comparable.

**Joined the Board during 2016-17, hence not comparable.

#Mr. Sridharan Rangarajan ceased to be the Chief Financial Officer effective closing hours of 17th January 2018.

**Notes:**

- The decrease in the remuneration of the Non-Executive Directors was mainly on account of the number of Board meetings attended by them during the year. The increase in Director's remuneration is also related to the re-constitution of several Board Committees during the year consequent to the change in Board composition resulting in increase in sitting fee received by them for attending meetings of the Committees in which they were inducted.
- Mr. K Srinivasan's remuneration for the year 2017-18 includes an un-availed LTA component of FY 2015-16 received during the year which has been appropriately factored in while computing the increase % above.
- Ms. Rekha Surendhiran's remuneration for the FY 2017-18 has been adjusted appropriately for the un-availed LTA component pertaining to the previous year. This has been factored in while computing the increase % above.

(iii) Percentage increase in the median remuneration of employees in the financial year: 2.82 per cent (employees who were in employment for the whole of FY 2016-17 & whole of FY 2017-18 considered for this purpose in the respective financial years).

(iv) Number of permanent employees on the rolls of the Company as on 31st March 2018: 2071

(v) The average percentile increase already made in the salaries of employees other than the managerial personnel in the last financial year is 9.63 per cent and the average percentage increase in the managerial remuneration is 9.51 per cent (employees/Directors who were in employment for whole of FY 2016-17 as well as whole of FY 2017-18 considered for this purpose).

The decrease in remuneration of the Non-Executive Directors was mainly on account of the number of Board meetings attended by them during the year. The increase in Director's remuneration is also related to the re-constitution of several Board Committees during the year consequent to the change in Board composition resulting in increase in sitting fee received by them for attending meetings of the Committees in which they were inducted.

Annual increase in employees remuneration is based on Company and individual performance. The individual performance parameters varies based on employee cadres. For management cadre employees, the performance is based on parameters such as financial performance, customer perspective, internal process improvements and learning & development. For non-management cadre and others, the performance is based on operational performance of SBUs/locations/ branches and long term settlements. This also applies to the Managing Director.

The Managerial remuneration is subject to regulatory ceiling limits. Other than Managing Director, the remuneration of Directors comprises only sitting fees and commission.

There are no exceptional circumstances for increase in managerial remuneration.

(vi) Affirmation that the remuneration is as per the Remuneration policy of the Company: The Company affirms that the remuneration is in compliance with its Remuneration policy.

On behalf of the Board

Chennai
May 4, 2018

**M M Murugappan**
*Chairman*

# ANNEXURE E

## Extract of Annual Return

**Form No. MGT-9**
**EXTRACT OF ANNUAL RETURN**
**as at the financial year ended on 31st March 2018**

[Pursuant to section 92(3) of the Companies Act, 2013 and rule 12(1) of the Companies (Management and Administration) Rules, 2014]

### I. REGISTRATION AND OTHER DETAILS

| | |
|---|---|
| i) Corporate Identification Number | L29224TN1954PLC000318 |
| ii) Registration Date | 21.04.1954 |
| iii) Name of the Company | Carborundum Universal Limited |
| iv) Category/Sub-Category of the Company | Company Limited by Shares/Indian Non-government Company |
| v) Address of the Registered office and contact details | 'Parry House', 43, Moore Street, Chennai - 600001<br>Tel: +91-44-30006161<br>Fax: +91-44-30006149<br>e-mail: investorservices@cumi.murugappa.com |
| vi) Whether listed company Yes / No | Yes |
| vii) Name, Address and Contact details of Registrar and Transfer Agent | Karvy Computershare Private Limited<br>Unit: Carborundum Universal Limited<br>Karvy Selenium Tower B, Plot 31-32,<br>Gachibowli, Financial District,<br>Nanakramguda, Hyderabad 500032<br>Tel: +91-40-67162222<br>Fax: +91-40-23420814<br>e-mail: einward.ris@karvy.com |

### II. PRINCIPAL BUSINESS ACTIVITIES OF THE COMPANY

All the business activities contributing 10% or more of the total turnover of the Company shall be stated:

| Sl. No. | Name and Description of main products/services | NIC Code of the Product/service | % to total turnover of the Company* |
|---|---|---|---|
| 1 | Abrasives | 23993 | 54.70 |
| 2 | Ceramics | 23939 | 25.54 |
| 3 | Electrominerals | 00729 | 19.76 |

*Does not include inter-segment sales

# Extract of Annual Return

## III. PARTICULARS OF HOLDING, SUBSIDIARY AND ASSOCIATE COMPANIES

| Sl. No. | Name and address of the Company | CIN | Holding/ Subsidiary/ Associate | % of Shares held | Applicable Section |
|---|---|---|---|---|---|
| **Direct holding** | | | | | |
| 1 | Net Access India Limited<br>'Parry House', VI Floor, 43 Moore Street,<br>Chennai - 600 001 | U74999TN1997PLC039545 | Subsidiary | 100.00 | 2(87)(ii) |
| 2 | Southern Energy Development Corporation Limited<br>'Parry House', 43 Moore Street, Chennai - 600 001 | U40100TN1985PLC012425 | Subsidiary | 84.76 | 2(87)(ii) |
| 3 | Sterling Abrasives Limited<br>Plot No 45/46 G I D C Industrial Estate, Odhva Road<br>Ahmedabad - 382 415 | U29259GJ1979PLC003467 | Subsidiary | 60.00 | 2(87)(ii) |
| 4 | CUMI International Limited<br>284 Arch. Makarou III Ave. Fortuna Court,<br>2nd Floor, 3105 Limassol Cyprus | Company Incorporated outside India | Subsidiary | 100.00 | 2(87)(ii) |
| 5 | CUMI (Australia) Pty Limited<br>Level 1, 56 Hudson Street, Hamilton NSW 2303 | Company Incorporated outside India | Subsidiary | 51.22 | 2(87)(ii) |
| **Holding through CUMI International Limited (a wholly owned subsidiary)** | | | | | |
| 6 | Volzhsky Abrasives Works<br>404130 Volzhsky,Volgograd Region,<br>6th Avtodoroga, 18 Russia | Company Incorporated outside India | Subsidiary | 98.07 | 2(87)(ii) |
| 7 | Foskor Zirconia (Pty) Limited<br>PO Box.1, Phalaborwa, South Africa, 1390 | Company Incorporated outside India | Subsidiary | 51.00 | 2(87)(ii) |
| 8 | CUMI America Inc<br>7310 Turfway Road, Ste 550, Florence<br>Kentucky 41042 USA | Company Incorporated outside India | Subsidiary | 100.00 | 2(87)(ii) |
| 9 | CUMI Middle East FZE<br>No. 315, BC - 3 PO Box. 16190, RAK FZE Trade Zone,<br>Ras Al Khaimah, United Arab Emirates | Company Incorporated outside India | Subsidiary | 100.00 | 2(87)(ii) |
| 10 | CUMI Abrasives & Ceramics Company Limited<br>East of Donghuan Road,<br>Yanjiao Development Zone, Sanhe City,<br>Hebei Province, P.R., China, 065201 | Company Incorporated outside India | Subsidiary | 100.00 | 2(87)(ii) |
| 11 | Thukela Refractories Isithebe Pty Ltd.<br>No.1 Yellow Street, Isithebe, South Africa | Company Incorporated outside India | Subsidiary | 100.00 | 2(87)(ii) |
| 12 | CUMI Europe s.r.o<br>Bucharova 2657/12 bld c 158000<br>Prague, Czech Republic | Company Incorporated outside India | Subsidiary | 100.00 | 2(87)(ii) |
| **Joint Ventures** | | | | | |
| 13 | Murugappa Morgan Thermal Ceramics Limited<br>PB NO 1570, Dare House Complex 5th Floor Extn 2,<br>NSC Bose Road, Chennai - 600 001 | U26919TN1982PLC009622 | Associate/ Joint Venture | 49.00 | 2(6) |
| 14 | Ciria India Limited<br>P-11 Pandav Nagar, Mayur Vihar Phase-1<br>New Delhi - 110 091 | U74899DL1997PLC091417 | Associate/ Joint Venture | 30.00 | 2(6) |
| 15 | Wendt (India) Limited<br>105, 1st Floor, Cauvery Block, National Games Housing<br>Complex, Koramangala, Bangalore - 560 047 | L85110KA1980PLC003913 | Associate/ Joint Venture | 39.87 | 2(6) |

## Extract of Annual Return

### IV. SHAREHOLDING PATTERN (Equity share capital breakup as percentage of total equity)

**i) Category-wise shareholding**

| Sl. No | Category of Shareholders | No. of Shares held at the beginning of the year (1st April 2017) | | | | No. of Shares held at the end of the year (31st March 2018) | | | | % Change during the year |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Demat | Physical | Total | % of Total Shares | Demat | Physical | Total | % of Total Shares | |
| **A.** | **Promoters** | | | | | | | | | |
| (1) | **Indian** | | | | | | | | | |
| a) | Individual/HUF | 7,544,438 | - | 7,544,438 | 4.00 | 7,260,318 | - | 7,260,318 | 3.84 | (0.16) |
| b) | Central/State Govt(s) | - | - | - | - | - | - | - | - | - |
| c) | Bodies Corporate | 58,946,944 | - | 58,946,944 | 31.25 | 56,446,944 | - | 56,446,944 | 29.87 | (1.37) |
| d) | Banks/FI | - | - | - | - | - | - | - | - | - |
| | Sub-total (A)(1) | 66,491,382 | - | 66,491,382 | 35.25 | 63,707,262 | - | 63,707,262 | 33.72 | (1.53) |
| (2) | **Foreign (A)(2)** | | | | | | | | | |
| a) | NRIs - | | | | | | | | | |
| | Individuals | 289,600 | | 289,600 | 0.15 | - | - | - | - | (0.15) |
| b) | Others - | | | | | | | | | |
| | Individuals | - | - | - | - | - | - | - | - | - |
| c) | Bodies Corporate | - | - | - | - | - | - | - | - | - |
| d) | Banks/FI | - | - | - | - | - | - | - | - | - |
| | Sub-total (A)(2) | 289,600 | - | 289,600 | 0.15 | - | - | - | - | (0.15) |
| | Total shareholding of Promoter (A) = (A)(1)+(A)(2) | 66,780,982 | - | 66,780,982 | 35.40 | 63,707,262 | - | 63,707,262 | 33.72 | (1.68) |
| **AA.** | **Promoter Group** | | | | | | | | | |
| | Individuals/HUF (AA)(1) | 6,482,904 | - | 6,482,904 | 3.44 | 6,507,004 | - | 6,507,004 | 3.44 | 0.01 |
| | Bodies Corporate/ others (AA)(2) | 9,287,320 | - | 9,287,320 | 4.92 | 9,936,920 | - | 9,936,920 | 5.26 | 0.34 |
| | Total shareholding of Promoter Group (AA)=(AA)(1)+(AA)(2) | 15,770,224 | - | 15,770,224 | 8.36 | 16,443,924 | - | 16,443,924 | 8.70 | 0.34 |
| | Total shareholding of Promoter & Promoter Group (A)+(AA) | 82,551,206 | - | 82,551,206 | 43.76 | 80,151,186 | - | 80,151,186 | 42.42 | (1.34) |

## Extract of Annual Return

| Sl. No | Category of Shareholders | No. of Shares held at the beginning of the year (1st April 2017) | | | | No. of Shares held at the end of the year (31st March 2018) | | | | % Change during the year |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Demat | Physical | Total | % of Total Shares | Demat | Physical | Total | % of Total Shares | |
| **B.** | **Public Shareholding** | | | | | | | | | |
| **(1)** | **Institutions** | | | | | | | | | |
| a) | Mutual Funds | 32,701,316 | - | 32,701,316 | 17.33 | 39,639,657 | - | 39,639,657 | 20.98 | 3.64 |
| b) | Banks/FI | 363,845 | - | 363,845 | 0.19 | 160,183 | - | 160,183 | 0.08 | (0.11) |
| c) | Central/State Govt(s) | - | - | - | - | - | - | - | - | - |
| d) | Venture Capital Funds | - | - | - | - | - | - | - | - | - |
| e) | Insurance Companies | 5,387,570 | - | 5,387,570 | 2.86 | 4,799,098 | - | 4,799,098 | 2.54 | (0.32) |
| f) | FIIs | 10,070,343 | 3,000 | 10,073,343 | 5.34 | 8,730,708 | 3,000 | 8,733,708 | 4.62 | (0.72) |
| g) | Foreign Venture Capital Funds | - | - | - | - | - | - | - | - | - |
| | Sub-total (B)(1) | 48,523,074 | 3,000 | 48,526,074 | 25.72 | 53,329,646 | 3,000 | 53,332,646 | 28.22 | 2.50 |
| **(2)** | **Non-Institutions** | | | | | | | | | |
| **a)** | **Bodies Corporate** | | | | | | | | | |
| i) | Indian | 13,234,396 | 143,110 | 13,377,506 | 7.09 | 11,729,118 | 141,090 | 11,870,208 | 6.28 | (0.81) |
| ii) | Overseas | - | - | - | - | - | - | - | - | - |
| **b)** | **Individuals** | | | | | | | | | |
| i) | Shareholders holding nominal share capital upto ₹1 lakh | 25,687,308 | 3,012,195 | 28,699,503 | 15.21 | 26,449,040 | 2,607,071 | 29,056,111 | 15.38 | 0.16 |
| ii) | Individual shareholders holding nominal share capital in excess of ₹1 lakh | 12,042,857 | 140,460 | 12,183,317 | 6.46 | 10,432,254 | 140,460 | 10,572,714 | 5.60 | (0.86) |
| **c)** | **Others** | | | | | | | | | |
| i) | Clearing members | 86,294 | - | 86,294 | 0.05 | 76,606 | - | 76,606 | 0.04 | (0.01) |
| ii) | NRI | 3,164,245 | 31,260 | 3,195,505 | 1.69 | 3,085,265 | 31,260 | 3,116,525 | 1.65 | (0.04) |
| iii) | Trusts | 24,485 | - | 24,485 | 0.01 | 21,910 | - | 21,910 | 0.01 | (0.00) |
| iv) | NBFCs Registered with RBI | 14,200 | - | 14,200 | 0.01 | 241,950 | - | 241,950 | 0.13 | 0.12 |
| v) | Investor Education and Protection Fund Authority | - | - | - | - | 515,895 | - | 515,895 | 0.27 | 0.27 |
| | Sub-total (B)(2) | 54,253,785 | 3,327,025 | 57,580,810 | 30.52 | 52,552,038 | 2,919,881 | 55,471,919 | 29.36 | (1.16) |
| | Total Public Shareholding (B)=(B)(1)+(B)(2) | 102,776,859 | 3,330,025 | 106,106,884 | 56.24 | 105,881,684 | 2,922,881 | 108,804,565 | 57.58 | 1.34 |
| **C.** | **Shares held by Custodian for GDRs & ADRs** | - | - | - | - | - | - | - | - | - |
| | **Grand Total (A+B+C)** | **185,328,065** | **3,330,025** | **188,658,090** | **100.00** | **186,032,870** | **2,922,881** | **188,955,751** | **100.00** | **NA** |

**Decrease in shareholding % of promoter/promoter group holding includes increase in share capital arising on account of allotment of equity shares to employees who have exercised their options during the year under the Company's ESOP Scheme 2007 and ESOP Plan 2016.*

## Extract of Annual Return

**(ii) Shareholding of Promoters**

| Sl No. | Shareholder's Name | Shareholding at the beginning of the year | | | Shareholding at the end of the year | | | % Change in shareholding during the year |
|---|---|---|---|---|---|---|---|---|
| | | No. of shares | % of total shares of the Company | % of shares Pledged / encumbered to total shares | No. of shares | % of total shares of the Company | % of shares Pledged / encumbered to total shares | |
| 1 | M V Murugappan (deceased)# | 204,200 | 0.11 | 0.00 | - | 0.00 | 0.00 | (0.11) |
| 2 | M V Murugappan HUF | 215,600 | 0.11 | 0.00 | 215,600 | 0.11 | 0.00 | (0.00) |
| 3 | M V Murugappan jointly M A Alagappan and M M Murugappan | 480 | 0.00 | 0.00 | 480 | 0.00 | 0.00 | (0.00) |
| 4 | M V Subbiah | 514,294 | 0.27 | 0.00 | 514,294 | 0.27 | 0.00 | (0.00) |
| 5 | M A Alagappan | 1,274,400 | 0.68 | 0.00 | 1,274,400 | 0.67 | 0.00 | (0.00) |
| 6 | A Vellayan | 303,260 | 0.16 | 0.03 | 303,260 | 0.16 | 0.03 | (0.00) |
| 7 | A Venkatachalam | 598,900 | 0.32 | 0.03 | 598,900 | 0.32 | 0.03 | (0.00) |
| 8 | M M Murugappan | 696,340 | 0.37 | 0.00 | 985,940 | 0.52 | 0.00 | 0.15 |
| 9 | M M Venkatachalam | 449,400 | 0.24 | 0.00 | 524,420 | 0.28 | 0.00 | 0.04 |
| 10 | M A M Arunachalam | 1,100,600 | 0.58 | 0.03 | 1,100,600 | 0.58 | 0.03 | (0.00) |
| 11 | S Vellayan | 694,544 | 0.37 | 0.00 | 694,544 | 0.37 | 0.00 | (0.00) |
| 12 | Arun Alagappan | 471,400 | 0.25 | 0.00 | 471,400 | 0.25 | 0.00 | (0.00) |
| 13 | V Arunachalam | 183,740 | 0.10 | 0.00 | 183,740 | 0.10 | 0.00 | (0.00) |
| 14 | V Narayanan | 205,900 | 0.11 | 0.00 | 205,900 | 0.11 | 0.00 | (0.00) |
| 15 | M M Muthiah | 289,600 | 0.15 | 0.00 | - | 0.00 | 0.00 | (0.15) |
| 16 | M M Veerappan | 289,600 | 0.15 | 0.00 | - | 0.00 | 0.00 | (0.15) |
| 17 | Arun Venkatachalam | 186,840 | 0.10 | 0.00 | 186,840 | 0.10 | 0.00 | (0.00) |
| 18 | M V Subramanian | 79,920 | 0.04 | 0.00 | - | 0.00 | 0.00 | (0.04) |
| 19 | M V Muthiah | 75,020 | 0.04 | 0.00 | - | 0.00 | 0.00 | (0.04) |
| 20 | Murugappa Holdings Limited | 55,432,284 | 29.38 | 0.00 | - | 0.00 | 0.00 | (29.38) |
| 21 | Ambadi Investments Limited (formerly known as Ambadi Investments Private Limited) | 3,121,960 | 1.65 | 0.00 | 56,054,244 | 29.67 | 0.00 | 28.01 |
| 22 | Ambadi Enterprises Limited | 384,700 | 0.20 | 0.00 | 384,700 | 0.20 | 0.00 | (0.00) |
| 23 | TI Financial Holdings Limited (formerly known as Tube Investments of India Limited) | 6,000 | 0.00 | 0.00 | 6,000 | 0.00 | 0.00 | 0.00 |
| 24 | E.I.D. Parry (India) Limited | 2,000 | 0.00 | 0.00 | 2,000 | 0.00 | 0.00 | 0.00 |
| 25 | New Ambadi Estates Private Limited | - | - | - | - | - | - | - |
| 26 | Coromandel International Limited | - | - | - | - | - | - | - |
| 27 | Murugappa & Sons (M.V. Murugappan, M.A. Alagappan and M.M. Murugappan hold shares on behalf of the Firm) | - | - | - | - | - | - | - |
| 28 | Tube Investments of India Limited (formerly known as TI Financial Holdings Limited) | - | - | - | - | - | - | - |
| | Total | 66,780,982 | 35.39 | 0.09 | 63,707,262 | 33.72 | 0.09 | (1.68) |

** The above table does not include the holdings of promoter group aggregating to 16,443,924 shares (8.7%) as at 31st March 2018.*
** Decrease in shareholding % is due to increase in share capital arising on account of allotment of equity shares to employees who have exercised their Options during the year under the Company's ESOP Scheme 2007 and ESOP Plan 2016.*
*# Shares have been transmitted to Spouse (Promoter Group).*

## Extract of Annual Return

**(iii) Change in Promoters' Shareholding:**

| Sl.No. | Particulars | Shareholding at the beginning of the year | | Cumulative Shareholding during the year | |
|---|---|---|---|---|---|
| | | No. of shares | % of total shares of the Company | No. of shares | % of total shares of the Company |
| **1** | **Aggregate holdings at the beginning of the year** | **6,67,80,982** | **35.40** | | |
| **2** | **Transactions during the year ended 31st March 2018** | | | | |
| i) | **Murugappa Holdings Limited** | | | | |
| | At the beginning of the year | 5,54,32,284 | 29.38 | | |
| | Transactions during the year ended 31st March 2018 | | | | |
| | Transfer-28/08/2017 (Transfer of shares on account of merger of Murugappa Holdings Limited with Ambadi Investments Limited formerly known as Ambadi Investments Pvt. Limited) | 5,54,32,284 | 29.38 | - | - |
| | At the end of the year | - | - | - | - |
| ii) | **Ambadi Investments Limited (formerly known as Ambadi Investments Private Limited)** | | | | |
| | At the beginning of the year | 31,21,960 | 1.65 | | |
| | Transactions during the year ended 31st March 2018 | | | | |
| | Transfer-28/08/2017 (Transfer of shares on account of merger of Murugappa Holdings Limited with Ambadi Investments Limited formerly known as Ambadi Investments Pvt. Limited) | 5,54,32,284 | 29.37 | 5,85,54,244 | 31.03 |
| | Transfer-30/03/2018 (Sale) | (25,00,000) | (1.32) | 5,60,54,244 | 29.67 |
| | At the end of the year | | | 5,60,54,244 | 29.67 |
| iii) | **Mr. M V Murugappan** | | | | |
| | At the beginning of the year | 2,04,200 | 0.11 | | |
| | Transfer-31/10/2017 (Transmission of shares) | (2,04,200) | (0.11) | - | - |
| | At the end of the year | - | - | | |
| iv) | **Mr. M M Muthiah** | | | | |
| | At the beginning of the year | 2,89,600 | 0.15 | | |
| | Transfer-27/03/2018 (transfer by way of gift) | (2,89,600) | (0.15) | - | - |
| | At the end of the year | - | - | | |
| v) | **Mr. M M Veerappan** | | | | |
| | At the beginning of the year | 2,89,600 | 0.15 | | |
| | Transfer-27/03/2018 (transfer by way of gift) | (2,89,600) | (0.15) | - | - |
| | At the end of the year | - | - | | |
| vi) | **M V Muthiah** | | | | |
| | At the beginning of the year | 75,020 | 0.04 | | |
| | Transfer-28/03/2018 (transfer by way of gift) | (75,020) | (0.04) | - | - |
| | At the end of the year | - | - | | |
| vii) | **M V Subramanian** | | | | |
| | At the beginning of the year | 79,920 | 0.04 | | |
| | Transfer-28/03/2018 (transfer by way of gift) | (79,920) | (0.04) | - | - |
| | At the end of the year | - | - | | |
| viii) | **M M Murugappan** | | | | |
| | At the beginning of the year | 6,96,340 | 0.37 | | |
| | Transfer-27/03/2018 (acquisition by way of gift) | 2,89,600 | 0.15 | 9,85,940 | 0.52 |
| | At the end of the year | - | - | 9,85,940 | 0.52 |
| ix) | **M M Venkatachalam** | | | | |
| | At the beginning of the year | 4,49,400 | 0.24 | | |
| | Transfer-28/03/2018 (acquisition by way of gift) | 75,020 | 0.04 | 5,24,420 | 0.28 |
| | At the end of the year | - | - | 5,24,420 | 0.28 |
| **3** | **Aggregate holdings at the end of the year** | | | **6,37,07,262** | **33.72** |

1. There was no change in promoter's shareholding other than the details specified above.
2. Decrease in shareholding percentage includes increase in share capital arising on account of allotment of employees who have exercised their options during the year under the Company's ESOP Scheme 2007 and ESOP Plan 2016.
3. The above table does not include changes in shareholding of Promoter Group during the year.

# Extract of Annual Return

## (iv) Shareholding Pattern of top ten Shareholders (other than Directors & Promoters)

| Sl. No. | For each of the top 10 shareholders | Shareholding at the beginning of the year | | Cumulative Shareholding during the year | |
|---|---|---|---|---|---|
| | | No. of shares | % of total shares of the Company | No. of shares | % of total shares of the Company |
| 1 | HDFC Trustee Company Limited (under various schemes) | | | | |
| | At the beginning of the year | 16,864,050 | 8.94 | | |
| | Transactions during the year ended 31st March 2018 | | | | |
| | Transfer-05/05/2017 (Purchase) | 8,300 | 0.00 | 16,872,350 | 8.94 |
| | Transfer-19/05/2017(Sale) | (10,000) | (0.01) | 16,862,350 | 8.94 |
| | Transfer-16/06/2017(Sale) | (4,000) | (0.00) | 16,858,350 | 8.94 |
| | Transfer-28/07/2017(Sale) | (1,500) | (0.00) | 16,856,850 | 8.93 |
| | Transfer-25/08/2017(Sale) | (16,000) | (0.01) | 16,840,850 | 8.92 |
| | Transfer-13/10/2017 (Purchase) | 500,000 | 0.26 | 17,340,850 | 9.18 |
| | Transfer-13/10/2017(Sale) | (504,500) | (0.27) | 16,836,350 | 8.92 |
| | Transfer-27/10/2017 (Purchase) | 24,000 | 0.01 | 16,860,350 | 8.93 |
| | Transfer-27/10/2017(Sale) | (24,000) | (0.01) | 16,836,350 | 8.91 |
| | Transfer-02/02/2018(Sale) | (203,153) | (0.11) | 16,633,197 | 8.81 |
| | Transfer-09/02/2018(Sale) | (100,000) | (0.05) | 16,533,197 | 8.75 |
| | Transfer-16/02/2018(Sale) | (167,900) | (0.09) | 16,365,297 | 8.66 |
| | Transfer-23/02/2018(Sale) | (14,500) | (0.01) | 16,350,797 | 8.65 |
| | Transfer-09/03/2018 (Purchase) | 867,947 | 0.46 | 17,218,744 | 9.11 |
| | Transfer-09/03/2018(Sale) | (867,947) | (0.46) | 16,350,797 | 8.65 |
| | Transfer-16/03/2018 (Purchase) | 100,000 | 0.05 | 16,450,797 | 8.71 |
| | Transfer-23/03/2018 (Purchase) | 423,000 | 0.22 | 16,873,797 | 8.93 |
| | At the end of the year | | | 16,873,797 | 8.93 |
| | | | | | |
| 2 | SBI Magnum Midcap Fund/SBI Mutual Fund | | | | |
| | At the beginning of the year | 4,935,210 | 2.62 | | |
| | Transactions during the year ended 31st March 2018 | | | | |
| | Transfer-16/03/2018 (Sale) | (887,907) | (0.47) | 4,047,303 | 2.14 |
| | At the end of the year | | | 4,047,303 | 2.14 |
| | | | | | |
| 3 | Smallcap World Fund, Inc | | | | |
| | At the beginning of the year | 4,365,000 | 2.31 | | |
| | Transactions during the year ended 31st March 2018 | | | | |
| | At the end of the year | | | 4,365,000 | 2.31 |
| | | | | | |
| 4 | Amrit Petroleums Private Limited (now called Shamyak Investment Private Limited) | | | | |
| | At the beginning of the year | 4,000,000 | 2.12 | | |
| | Transactions during the year ended 31st March 2018 | | | | |
| | At the end of the year | | | 4,000,000 | 2.12 |
| | | | | | |
| 5 | Reliance Capital Trustee Company Limited | | | | |
| | At the beginning of the year | - | - | | |
| | Transactions during the year ended 31st March 2018 | | | | |
| | Transfer-05/01/2018 (Purchase) | 31,034 | 0.02 | 31,034 | 0.02 |
| | Transfer-12/01/2018 (Purchase) | 657,966 | 0.35 | 689,000 | 0.36 |
| | Transfer-19/01/2018 (Purchase) | 200,000 | 0.11 | 889,000 | 0.47 |
| | Transfer-02/02/2018 (Purchase) | 179,441 | 0.09 | 1,068,441 | 0.57 |
| | Transfer-23/03/2018 (Purchase) | 16,700 | 0.01 | 1,085,141 | 0.57 |
| | Transfer-30/03/2018 (Purchase) | 2,020,000 | 1.07 | 3,105,141 | 1.64 |
| | At the end of the year | | | 3,105,141 | 1.64 |
| | | | | | |
| 6 | General Insurance Corporation of India | | | | |
| | At the beginning of the year | 3,000,000 | 1.59 | | |
| | Transactions during the year ended 31st March 2018 | | | | |
| | At the end of the year | | | 3,000,000 | 1.59 |

## Extract of Annual Return

| Sl. No. | For each of the top 10 shareholders | Shareholding at the beginning of the year | | Cumulative Shareholding during the year | |
|---|---|---|---|---|---|
| | | No. of shares | % of total shares of the Company | No. of shares | % of total shares of the Company |
| 7 | L&T Mutual Fund Trustee Limited | | | | |
| | At the beginning of the year | 25,82,179 | 1.37 | | |
| | Transactions during the year ended 31st March 2018 | | | | |
| | Transfer-07/04/2017 (Purchase) | 20,000 | 0.01 | 26,02,179 | 1.38 |
| | Transfer-14/04/2017 (Purchase) | 38,200 | 0.02 | 26,40,379 | 1.40 |
| | Transfer-21/04/2017 (Purchase) | 27,800 | 0.01 | 26,68,179 | 1.41 |
| | Transfer-05/05/2017 (Purchase) | 15,300 | 0.01 | 26,83,479 | 1.42 |
| | Transfer-12/05/2017 (Purchase) | 2,94,300 | 0.16 | 29,77,779 | 1.58 |
| | Transfer-19/05/2017 (Purchase) | 39,000 | 0.02 | 30,16,779 | 1.60 |
| | Transfer-26/05/2017 (Purchase) | 15,000 | 0.01 | 30,31,779 | 1.61 |
| | Transfer-02/06/2017 (Purchase) | 80,600 | 0.04 | 31,12,379 | 1.65 |
| | Transfer-09/06/2017 (Purchase) | 36,700 | 0.02 | 31,49,079 | 1.67 |
| | Transfer-16/06/2017 (Purchase) | 38,524 | 0.02 | 31,87,603 | 1.69 |
| | Transfer-23/06/2017 (Purchase) | 1,19,118 | 0.06 | 33,06,721 | 1.75 |
| | Transfer-30/06/2017 (Purchase) | 1,42,347 | 0.08 | 34,49,068 | 1.83 |
| | Transfer-07/07/2017 (Purchase) | 81,635 | 0.04 | 35,30,703 | 1.87 |
| | Transfer-14/07/2017 (Purchase) | 41,900 | 0.02 | 35,72,603 | 1.89 |
| | Transfer-21/07/2017 (Purchase) | 18,517 | 0.01 | 35,91,120 | 1.90 |
| | Transfer-28/07/2017 (Purchase) | 5,000 | 0.00 | 35,96,120 | 1.91 |
| | Transfer-11/08/2017 (Purchase) | 33,628 | 0.02 | 36,29,748 | 1.92 |
| | Transfer-18/08/2017 (Purchase) | 81,836 | 0.04 | 37,11,584 | 1.97 |
| | Transfer-25/08/2017 (Purchase) | 3,85,646 | 0.20 | 40,97,230 | 2.17 |
| | Transfer-01/09/2017 (Purchase) | 35,000 | 0.02 | 41,32,230 | 2.19 |
| | Transfer-15/09/2017 (Purchase) | 50,652 | 0.03 | 41,82,882 | 2.22 |
| | Transfer-29/09/2017 (Purchase) | 26,048 | 0.01 | 42,08,930 | 2.23 |
| | Transfer-13/10/2017 (Purchase) | 1,10,000 | 0.06 | 43,18,930 | 2.29 |
| | Transfer-20/10/2017 (Purchase) | 62,000 | 0.03 | 43,80,930 | 2.32 |
| | Transfer-27/10/2017 (Purchase) | 2,47,610 | 0.13 | 46,28,540 | 2.45 |
| | Transfer-31/10/2017 (Purchase) | 47,143 | 0.02 | 46,75,683 | 2.48 |
| | Transfer-03/11/2017 (Purchase) | 24,497 | 0.01 | 47,00,180 | 2.49 |
| | Transfer-10/11/2017 (Purchase) | 96,208 | 0.05 | 47,96,388 | 2.54 |
| | Transfer-17/11/2017 (Purchase) | 3,60,586 | 0.19 | 51,56,974 | 2.73 |
| | Transfer-24/11/2017 (Purchase) | 57,523 | 0.03 | 52,14,497 | 2.76 |
| | Transfer-01/12/2017 (Purchase) | 65,341 | 0.03 | 52,79,838 | 2.80 |
| | Transfer-08/12/2017 (Purchase) | 2,75,833 | 0.15 | 55,55,671 | 2.94 |
| | Transfer-15/12/2017 (Purchase) | 1,71,991 | 0.09 | 57,27,662 | 3.03 |
| | Transfer-22/12/2017 (Purchase) | 2,29,067 | 0.12 | 59,56,729 | 3.15 |
| | Transfer-05/01/2018 (Purchase) | 29,152 | 0.02 | 59,85,881 | 3.17 |
| | Transfer-12/01/2018 (Purchase) | 2,52,522 | 0.13 | 62,38,403 | 3.30 |
| | Transfer-19/01/2018 (Purchase) | 20,996 | 0.01 | 62,59,399 | 3.31 |
| | Transfer-26/01/2018 (Purchase) | 7,699 | 0.00 | 62,67,098 | 3.32 |
| | Transfer-02/02/2018 (Purchase) | 1,27,960 | 0.07 | 63,95,058 | 3.39 |
| | Transfer-09/02/2018 (Purchase) | 1,04,677 | 0.06 | 64,99,735 | 3.44 |
| | Transfer-16/02/2018 (Purchase) | 2,02,900 | 0.11 | 67,02,635 | 3.55 |
| | Transfer-23/02/2018 (Purchase) | 1,17,523 | 0.06 | 68,20,158 | 3.61 |
| | Transfer-09/03/2018 (Purchase) | 3,35,586 | 0.18 | 71,55,744 | 3.79 |
| | Transfer-16/03/2018 (Purchase) | 2,97,839 | 0.16 | 74,53,583 | 3.94 |
| | Transfer-23/03/2018 (Purchase) | 15,000 | 0.01 | 74,68,583 | 3.95 |
| | At the end of the year | | | 74,68,583 | 3.95 |

## Extract of Annual Return

| Sl. No. | For each of the top 10 shareholders | Shareholding at the beginning of the year | | Cumulative Shareholding during the year | |
|---|---|---|---|---|---|
| | | No. of shares | % of total shares of the Company | No. of shares | % of total shares of the Company |
| 8 | American Funds Insurance Series Global Small Capitalization Fund | | | | |
| | At the beginning of the year | 24,40,000 | 1.29 | | |
| | Transactions during the year ended 31st March 2018 | | | | |
| | Transfer-04/08/2017 (Sale) | (15,957) | (0.01) | 24,24,043 | 1.28 |
| | Transfer- 11/08/2017 (Sale) | (31,831) | (0.02) | 23,92,212 | 1.27 |
| | Transfer-18/08/2017 (Sale) | (5,73,060) | (0.30) | 18,19,152 | 0.96 |
| | Transfer-25/08/2017 (Sale) | (79,152) | (0.04) | 17,40,000 | 0.92 |
| | At the end of the year | | | 17,40,000 | 0.92 |
| | | | | | |
| 9 | Franklin India Smaller Companies Fund | | | | |
| | At the beginning of the year | 23,74,305 | 1.26 | | |
| | Transactions during the year ended 31st March 2018 | | | | |
| | Transfer-12/01/2018 (Sale) | (2,00,000) | (0.11) | 21,74,305 | 1.15 |
| | At the end of the year | | | 21,74,305 | 1.15 |
| | | | | | |
| 10 | Aditya Birla Sun Life Trustee Private Limited | | | | |
| | At the beginning of the year | 23,30,440 | 1.24 | | |
| | Transactions during the year ended 31st March 2018 | | | | |
| | Transfer-07/04/2017 (Sale) | (750) | (0.00) | 23,29,690 | 1.23 |
| | Transfer-21/04/2017 (Purchase) | 49,690 | 0.03 | 23,79,380 | 1.26 |
| | Transfer-21/04/2017 (Sale) | (24,690) | (0.01) | 23,54,690 | 1.25 |
| | Transfer-28/04/2017 (Purchase) | 25,000 | 0.01 | 23,79,690 | 1.26 |
| | Transfer-12/05/2017 (Purchase) | 15,200 | 0.01 | 23,94,890 | 1.27 |
| | Transfer-19/05/2017 (Purchase) | 3,500 | 0.00 | 23,98,390 | 1.27 |
| | Transfer-26/05/2017 (Purchase) | 5,00,000 | 0.27 | 28,98,390 | 1.54 |
| | Transfer-29/09/2017 (Purchase) | 12,500 | 0.01 | 29,10,890 | 1.54 |
| | Transfer-13/10/2017 (Purchase) | 3,75,000 | 0.20 | 32,85,890 | 1.74 |
| | Transfer-13/10/2017 (Sale) | (4,50,000) | (0.24) | 28,35,890 | 1.50 |
| | Transfer-20/10/2017 (Purchase) | 75,000 | 0.04 | 29,10,890 | 1.54 |
| | Transfer-20/10/2017 (Sale) | (2,25,000) | (0.12) | 26,85,890 | 1.42 |
| | Transfer-27/10/2017 (Purchase) | 2,25,000 | 0.12 | 29,10,890 | 1.54 |
| | Transfer-05/01/2018 (Purchase) | 1,18,448 | 0.06 | 30,29,338 | 1.60 |
| | Transfer-12/01/2018 (Purchase) | 3,100 | 0.00 | 30,32,438 | 1.61 |
| | Transfer-19/01/2018 (Purchase) | 42,000 | 0.02 | 30,74,438 | 1.63 |
| | Transfer-09/02/2018 (Purchase) | 8,75,000 | 0.46 | 39,49,438 | 2.09 |
| | Transfer-09/02/2018 (sale) | (8,75,000) | (0.46) | 30,74,438 | 1.63 |
| | Transfer-23/03/2018 (Purchase) | 9,000 | 0.00 | 30,83,438 | 1.63 |
| | At the end of the year | | | 30,83,438 | 1.63 |
| | | | | | |
| 11 | Aadi Financial Advisors LLP | | | | |
| | At the beginning of the year | 21,83,509 | 1.16 | | |
| | Transactions during the year ended 31st March 2018 | | | | |
| | At the end of the year | | | 21,83,509 | 1.16 |
| | | | | | |

**Notes:**

1. As the Company is listed, its shares are traded on a daily basis and hence the above dates refer to the respective beneficiary position dates.
2. The above list comprises top 10 shareholders as on 1st April 2017 and as on 31st March 2018.
3. The % change in holding despite nil changes during the year is on account of increase in share capital upon allotment of equity shares to employees who have exercised their options under the Company's ESOP Scheme 2007 and ESOP Plan 2016.
4. The holdings of the shareholders have been combined based on PAN and folio no./client ID.

### (v) Shareholding of Directors and Key Managerial Personnel

| Sl. No. | For each of the Directors and KMP | Shareholding at the beginning of the year | | Cumulative Shareholding during the year | |
|---|---|---|---|---|---|
| | | No. of shares | % of total shares of the Company | No. of shares | % of total shares of the Company |
| 1 | M M Murugappan | | | | |
| | At the beginning of the year | 696,340 | 0.37 | | |
| | Transfer-27/03/2018 (acquisition by way of gift) | 289,600 | 0.15 | 985,940 | 0.52 |
| | At the end of the year | - | - | 985,940 | 0.52 |
| 2 | M A M Arunachalam | | | | |
| | At the beginning of the year | 1,100,600 | 0.58 | | |
| | Transactions during the year ended 31st March 2018 | - | - | - | - |
| | At the end of the year | | | 1,100,600 | 0.58 |
| 3 | K Srinivasan | | | | |
| | At the beginning of the year | 357,530 | 0.19 | | |
| | Transactions during the year ended 31st March 2018 | | | | |
| | Allotment of equity shares on exercise of options under the ESOP Scheme 2007 - 22/08/2017 | 38,000 | 0.02 | 395,530 | 0.21 |
| | At the end of the year | | | 395,530 | 0.21 |
| 4 | Sridharan Rangarajan** | | | | |
| | At the beginning of the year | 10,000 | 0.01 | | |
| | Transactions during the year ended 31st March 2018 | - | - | - | - |
| | As at 17th January 2018 | | | 10,000 | 0.01 |

** None of the other Directors and Key Managerial Personnel hold shares in the Company.*

*** Mr. Sridharan Rangarajan stepped down as the Chief Finanical Officer w.e.f. the closing hours of 17th January 2018.*

## V. INDEBTEDNESS OF THE COMPANY INCLUDING INTEREST OUTSTANDING/ACCRUED BUT NOT DUE FOR PAYMENT

₹ million

| | Secured Loans excluding deposits | Unsecured Loans | Deposits | Total Indebtedness |
|---|---|---|---|---|
| **Indebtedness at the beginning of the financial year** | | | | |
| i) Principal Amount | 25.98 | - | - | 25.98 |
| ii) Interest due but not paid | - | - | - | - |
| iii) Interest accrued but not due | - | - | - | - |
| **Total (i+ii+iii)** | **25.98** | **-** | **-** | **25.98** |
| **Change in Indebtedness during the financial year** | | | | |
| • Addition | 421.14 | - | - | 421.14 |
| • Reduction | 429.03 | - | - | 429.03 |
| **Net Change** | **(7.89)** | **-** | **-** | **(7.89)** |
| **Indebtedness at the end of the financial year** | | | | |
| i) Principal Amount | **18.09** | **-** | **-** | **18.09** |
| ii) Interest due but not paid | - | - | - | - |
| iii) Interest accrued but not due | - | - | - | - |
| **Total (i+ii+iii)** | **18.09** | **-** | **-** | **18.09** |

## VI. REMUNERATION OF DIRECTORS AND KEY MANAGERIAL PERSONNEL

### A. Remuneration to Managing Director, Whole-time Directors and/or Manager: Mr. K Srinivasan, Managing Director

₹ million

| Sl. no. | Particulars of Remuneration | Total Amount |
|---|---|---|
| 1 | Gross salary | 22.20 |
| | (a) Salary as per provisions contained in section 17(1) of the Income-tax Act, 1961 | |
| | (b) Value of perquisites u/s 17(2) of Income-tax Act, 1961 | 0.03 |
| | (c) Profits in lieu of salary under section 17(3) Income-tax Act, 1961 | - |
| 2 | Stock Option* | - |
| 3 | Sweat Equity | - |
| 4 | Commission as % of profit | - |
| 5 | Others | - |
| | Total (A) | 22.23 |
| | Ceiling as per the Act | 104.75 |

**The deemed benefit on exercise of Options under the Company's ESOP Scheme 2007 has not been considered as there was no cost to the Company.*

### B. Remuneration to other Directors

₹ million

| Sl. no. | Particulars of Remuneration | Name of the Director | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | **Independent Directors** | **T L Palani Kumar** | **M Lakshminarayan*** | **Shobhan M Thakore*** | **Sanjay Jayavarthanavelu** | **Aroon Raman** | **Bharati Rao** | **P S Raghavan**** | **Sujjain S Talwar**** | **Total** |
| | Fee for attending Board/ Committee meetings | 0.32 | 0.13 | 0.10 | 0.19 | 0.20 | 0.18 | 0.17 | 0.25 | 1.54 |
| | Commission | 0.75 | 0.25 | 0.25 | 0.75 | 0.75 | 0.75 | 0.67 | 0.67 | 4.84 |
| | Others | - | - | - | - | - | - | | | - |
| | **Total(1)** | **1.07** | **0.38** | **0.35** | **0.94** | **0.95** | **0.93** | **0.84** | **0.92** | **6.38** |
| 2 | **Other Non-Executive Directors** | **M M Murugappan** | **M A M Arunachalam** | | | | | | | **Total** |
| | Fee for attending Board/ Committee meetings | 0.21 | 0.19 | | | | | | | 0.40 |
| | Commission | 10.00 | 0.75 | | | | | | | 10.75 |
| | Others | - | - | | | | | | | - |
| | **Total(2)** | **10.21** | **0.94** | | | | | | | **11.15** |
| | **Total Managerial Remuneration (B)=(1+2)** | | | | | | | | | **17.53** |
| | **Overall ceiling as per the Act excluding sitting fees** | | | | | | | | | **20.95** |

** Mr. M Lakshminarayan and Mr. Shobhan M Thakore retired from the Board effective closing hours of 31st July 2017.*

*** Mr. P S Raghavan and Mr. Sujjain S Talwar were appointed as Directors w.e.f. 9th May 2017.*

### C. Remuneration To Key Managerial Personnel other than MD/Manager/WTD

₹ million

| Sl. no. | Particulars of Remuneration | Key Managerial Personnel | | | |
|---|---|---|---|---|---|
| | | **CEO** | **Company Secretary** | **CFO**** | **Total** |
| 1 | Gross salary<br>(a) Salary as per provisions contained in section 17(1) of the Income-tax Act, 1961 | NA* | 4.09 | 8.48 | 12.57 |
| | (b) Value of perquisites u/s 17(2) Income-tax Act, 1961 | | 0.02 | 0.03 | 0.05 |
| | (c) Profits in lieu of salary under section 17(3) Incometax Act, 1961 | | - | - | - |
| 2 | Stock Option | | - | - | - |
| 3 | Sweat Equity | | - | - | - |
| 4 | Commission<br>- as % of profit<br>- others | | - | - | - |
| 5 | Others | | - | - | - |
| | **Total** | | **4.11** | **8.51** | **12.62** |

** The Company has a Managing Director whose details are provided above in VI A above.*

*** Mr. Sridharan Rangarajan stepped down as the Chief Financial Officer w.e.f closing hours of 17th January 2018 and above remuneration represents his remuneration till the date he was the KMP of the Company.*

### VII. Penalties/Punishment/Compounding of Offences against the Company, Directors, other officers in default in respect of provisions of the Companies Act, 2013 - Nil

On behalf of the Board
**M M Murugappan**
*Chairman*

Chennai
May 4, 2018

# ANNEXURE F

## SECRETARIAL AUDIT REPORT

**FOR THE FINANCIAL YEAR ENDED 31st MARCH, 2018**

[Pursuant to Section 204(1) of the Companies Act, 2013 and Rule No.9 of the Companies (Appointment and Remuneration of Managerial Personnel) Rules, 2014]

To,

The Members,
**Carborundum Universal Limited**
Parry House, 43 Moore Street
Chennai - 600001

We have conducted the secretarial audit of the compliance of applicable statutory provisions and the adherence to good corporate practices by Carborundum Universal Limited [Corporate Identification Number: L29224TN1954PLC000318] (hereinafter called "the Company"). Secretarial Audit was conducted in a manner that provided us a reasonable basis for evaluating the corporate conducts/statutory compliances and expressing our opinion thereon.

Based on our verification of Company's books, papers, minute books, forms and returns filed and other records maintained by the Company and also the information provided by the Company, its officers, agents and authorized representatives during the conduct of secretarial audit, We hereby report that in our opinion, the Company has, during the audit period covering the financial year ended on 31st March, 2018 complied with the statutory provisions listed hereunder and also that the Company has proper Board-processes and compliance mechanism in place to the extent, in the manner and subject to the reporting made hereinafter:

We have examined the books, papers, minute books, forms and returns filed and other records maintained by the Company for the financial year ended on 31st March, 2018 according to the provisions of:

(i) The Companies Act, 2013 (the Act) and the rules made there under and the Companies Act, 1956 to the extent applicable;

(ii) The Securities Contracts (Regulation) Act, 1956 ('SCRA') and the rules made there under;

(iii) The Depositories Act, 1996 and the Regulations and Bye-laws framed there under;

(iv) During the year under review the Company has complied with the provisions of Foreign Exchange Management Act, 1999 and the rules and regulations made thereunder to the extent of Overseas Direct Investment. There is no Foreign Direct Investment and External Commercial Borrowings during the year under review;

(v) The following Regulations and Guidelines prescribed under the Securities and Exchange Board of India Act, 1992 ('SEBI Act'):-

(a) The Securities and Exchange Board of India (Substantial Acquisition of Shares and Takeovers) Regulations, 2011;

(b) The Securities and Exchange Board of India (Prohibition of Insider Trading) Regulations, 2015;

(c) During the year under review, the Company has not issued any new securities mandating compliance of the provisions of the Securities and Exchange Board of India (Issue of Capital and Disclosure Requirements) Regulations, 2009;

(d) The Employee Stock Option Plan, 2016 approved under the Securities Exchange Board of India (Share Based Employee Benefits) Regulations, 2014 and the Employee Stock Option Scheme, 2007 approved under the Securities Exchange Board of India (Employee Stock Option Scheme and Employee Stock Purchase Scheme) Guidelines, 1999.

(e) During the period under review, the Company has neither issued any debentures nor has any outstanding debentures to be redeemed and hence the compliance of the provisions of the Securities and Exchange Board of India (Issue and Listing of Debt Securities) Regulations, 2008 is not applicable;

(f) The Securities and Exchange Board of India (Registrars to an Issue and Share Transfer Agents) Regulations, 1993 regarding the Companies Act and dealing with client;

(g) During the year under review, the Company has not delisted its Securities from any of the Stock Exchanges in which it is listed and hence the compliance of the provisions of the Securities and Exchange Board of India (Delisting of Equity Shares) Regulations, 2009 is not applicable; and

(h) The Company has not bought back any shares during the period under review and hence the provisions of compliance of the Securities and Exchange Board of India (Buyback of Securities) Regulations, 1998 is not applicable;

(vi) We have reviewed the systems and mechanisms established by the Company for ensuring compliances under the other applicable Acts, Rules, Regulations and Guidelines prescribed under various laws which are applicable to the Company and categorized under the following major heads/groups:

1. Factories Act, 1948;
2. Labour laws and other incidental laws related to labour and employees appointed by the Company including those on

contractual basis as relating to wages, gratuity, prevention of sexual harassment, dispute resolution, welfare, provident fund, insurance, compensation etc.;

3. Industries (Development & Regulation) Act, 1991;
4. Acts relating to consumer protection including The Competition Act, 2002;
5. Acts and Rules prescribed under prevention and control of pollution;
6. Acts and Rules relating to Environmental protection and energy conservation;
7. Acts and Rules relating to hazardous substances and chemicals;
8. Acts and Rules relating to electricity, fire, petroleum, drugs, motor vehicles, explosives, boilers etc.;
9. Acts relating to mining activities;
10. Acts relating to protection of IPR;
11. The Information Technology Act, 2000;
12. Land revenue laws and
13. Other local laws as applicable to various plants and offices.

With respect to Fiscal laws such as Income Tax, Professional Tax, Goods and Service Tax etc., based on the information and explanation provided to us by the management and officers of the Company and certificates placed before the Board of Directors, we report that adequate systems are in place to monitor and ensure compliance of fiscal laws as mentioned above.

We have also examined compliance with the applicable clauses / regulations of the following:

(i) Secretarial Standards with respect to Meetings of Board of Directors (SS-1) and General Meetings (SS-2) issued by The Institute of Company Secretaries of India.

(ii) The Uniform Listing Agreement entered into with BSE Limited and the National Stock Exchange of India Limited pursuant to the provisions of the SEBI (Listing Obligations and Disclosure Requirements) Regulations, 2015.

During the period under review the Company has complied with the provisions of the Act, Rules, Regulations, Guidelines, Standards etc. mentioned above.

**We further report that**

The Board of Directors of the Company is duly constituted with proper balance of Executive Directors, Non-Executive Directors and Independent Directors. The changes in the composition of the Board of Directors that took place during the period under review were carried out in compliance with the provisions of the Act.

Adequate notice is given to all Directors before the schedule of the Board Meetings, agenda and detailed notes on agenda were sent at least seven days in advance, and a system exists for seeking and obtaining further information and clarifications on the agenda items before the meeting and for meaningful participation at the meeting. Notes on agenda which are circulated less than the specified period, the necessary compliances under the Companies Act, 2013 and Secretarial Standards on Board Meetings are complied with. There are certain businesses that can be transacted through Video Conferencing / Audio Visual means as provided for under the Companies Act, 2013 and the relevant Rules made there under. The Company has properly convened & recorded in compliance with Rule 3 of Companies (Meetings of Board and its Powers) Rules, 2014 businesses that have been transacted through Video Conferencing / Audio Visual means.

Based on the verification of the records and minutes, the decisions were carried out with the consent of the Board of Directors / Committee Members and no Director / Member dissented on the decisions taken at such Board / Committee Meetings.

**We further report that** based on the review of compliance mechanism established by the Company, we are of the opinion that the management has adequate systems and processes commensurate with its size and operations, to monitor and ensure compliance with all applicable laws including labour laws, rules, regulations and guidelines.

**We further report** that during the audit period, that there were no specific events having major bearing on the Company's affairs in pursuance of above referred laws, rules, regulations, guidelines and standards during the period under review.

**For R.Sridharan & Associates**
*Company Secretaries*

**CS R.Sridharan**
CP No. 3239
FCS No. 4775
UIN: S2003TN063400

Chennai
May 4, 2018

# Corporate Governance Report

**[PURSUANT TO SCHEDULE V OF THE SECURITIES AND EXCHANGE BOARD OF INDIA (LISTING OBLIGATIONS AND DISCLOSURE REQUIREMENTS) REGULATIONS, 2015]**

Corporate Governance refers to a system of rules, practices and processes by which a company is directed and controlled. It provides the structure through which a company sets its objectives and the framework within which these objectives are pursued in the context of the social, regulatory and market environment.

Governance essentially involves aligning the interests of the various stakeholders in a Company and encompasses practically every sphere of management, from action plans and internal controls to performance measurement and corporate disclosures. The purpose is to facilitate effective and prudent management essential for the long term success of a company.

## 1. CUMI'S CORPORATE GOVERNANCE PHILOSOPHY

Carborundum Universal Limited ("CUMI"), a constituent of the Murugappa Group, is committed to the highest standards of Corporate Governance in all its activities and processes. Key elements in Corporate Governance are transparency, internal controls, risk management, internal/external communications and good standards of safety, health, environment and quality. The Board recognises that governance expectations are constantly evolving and is committed to keeping its governance standards under continuous review to meet both letter and spirit of the law and its own demanding levels of business ethics. CUMI considers Corporate Governance as the cornerstone for sustained superior performance and for serving all its stakeholders. The Company's continuing contribution to the society through meaningful Corporate Social Responsibility initiatives, be it direct initiatives through the CUMI Skill Development Centre or indirect initiatives through contributions to eligible implementing agencies in the core sectors of health & education, plays a significant role in its governance initiatives. The entire process begins with the functioning of the Board of Directors, with leading professionals and experts serving as Independent Directors and representing in various Board Committees.

The Company has always believed in and practices the highest standards of Corporate Governance since its inception and considers that sound governance practices are crucial for its smooth and efficient operations as well as its ability to attract investments, balancing the interests of all its stakeholders and providing shareholder value. The behaviour and ethics of an organisation are considered to be two defining characteristics of any Company critical to not only successful leadership but also in ensuring long term sustainability. CUMI's ethical and responsible behaviour complements its corporate culture which is guided by the following norm:

"The fundamental principle of economic activity is that no man you transact with will lose; then you shall not".

The Corporate Governance philosophy of the Company is driven by the fundamental principles of:

- Adhering to the governance standards beyond the letter of law;
- Maintaining transparency and high degree of disclosure levels;
- Maintaining clear distinction between personal and corporate interest;
- Having a transparent corporate structure driven by business needs; and
- Ensuring compliance with applicable laws.

The Company's constant endeavour for corporate excellence has been well recognised through incessant awards and accolades reiterating its commitment to governance standards. While the Company won the coveted Golden Peacock award for Corporate Ethics last year, in recognition of its governance initiatives and processes, it has been conferred this prestigious award for Corporate Governance in the engineering sector during the year.

## 2. BOARD OF DIRECTORS

The Board being aware of its fiduciary responsibilities, recognises its responsibilities towards all stakeholders and upholds highest standards in all matters concerning the Company. It has empowered responsible persons to implement its broad policies and guidelines besides setting up adequate review processes.

The Board provides strategic guidance on affairs of the Company in addition to reviewing the performance and monitoring the implementation of plans periodically. The Independent Directors provide an objective judgement on matters placed before them.

The Company's day to day affairs are managed by the Managing Director, assisted by a competent Management team under the overall supervision of the Board. The Company's commitment to ethical and lawful business conduct is a fundamental shared value of the Board, Senior Management and all its employees.

Consistent with its Values and Beliefs represented by the Five Lights - spirit of the Murugappa Group, the Company has formulated a Code of Conduct applicable to the Board and Senior Management which is posted on the website of the Company at *https://www.cumi-murugappa.com/policies.html.* An annual declaration is obtained from every person covered by the Code of Conduct. A declaration to this effect signed by the Managing Director is annexed to this Report.

The Board is committed to representing the long-term interests of the stakeholders, providing effective governance over the Company's affairs and exercising reasonable business judgement on the affairs of the Company.

### 2.1 Composition

The Board has been constituted in an appropriate manner, to preserve its independence and to separate the Board functions of governance and management. The Board members are eminent persons and have collective experience in diverse fields of technology, engineering, banking, foreign affairs, management, legal and compliance. The Directors are elected based on their qualification and experience in varied fields. The Board has formulated a Board Diversity policy to ensure an optimum composition such that the talent of all members of the Board blend together to be as effective as possible. The Board has an appropriate mix of Executive/Non-Executive as well as Independent Directors including a Woman Director to ensure proper governance and management.

As at 31st March 2018, the Board comprises 9 members with a majority of them being Independent Directors.

| Name | Category | No. of Directorships / (Chairmanships) in Companies including CUMI (a) | No. of other Directorships | No. of Committee memberships / (Chairmanships) in Companies including CUMI (b) | No. of Board meetings attended | Attendance at last AGM | Shares held in CUMI |
|---|---|---|---|---|---|---|---|
| M M Murugappan<br>DIN - 00170478 | Promoter & Non-Executive Director | 10 (7) | 5 | 8 (5) | 6 | Yes | 985,940 |
| T L Palani Kumar<br>DIN - 00177014 | Non-Executive & Independent Director | 2 | 1 | 1 (1) | 6 | Yes | Nil |
| Sanjay Jayavarthanavelu<br>DIN - 00004505 | Non-Executive & Independent Director | 10 (4) | 2 | 2 | 4 | Yes | Nil |
| Aroon Raman<br>DIN - 00201205 | Non-Executive & Independent Director | 4 | 3 | 3 | 5 | No | Nil |
| Bharati Rao<br>DIN - 01892516 | Non-Executive & Independent Director | 10 | - | 9 (1) | 4 | Yes | Nil |
| M A M Arunachalam<br>DIN - 00202958 | Promoter & Non-Executive Director | 4 | 4 | 3 (1) | 6 | Yes | 1,100,600 |
| P S Raghavan<br>DIN - 07812320 | Non-Executive & Independent Director | 1 | - | - | 5 | Yes | Nil |
| Sujjain Suresh Talwar<br>DIN - 01756539 | Non-Executive & Independent Director | 1 | 5 | 1 | 6 | Yes | Nil |
| K Srinivasan<br>DIN - 00088424 | Managing Director | 4 (1) | 6 | 3 | 6 | Yes | 395,530 |

(a) Excluding Alternate Directorships and Directorships in Foreign companies, Private companies (which are not subsidiary or holding company of a Public company) and Section 8 companies;

(b) Only Audit & Stakeholders Relationship Committee of Public companies;

(c) Inter-se relationship between Directors - Nil;

(d) Mr. M Lakshminarayan and Mr. Shobhan M Thakore, Independent Directors retired from the Board at the closing hours of 31st July 2017 on account of completion of their term of appointment;

(e) Mr. P S Raghavan and Mr. Sujjain S Talwar were appointed as Directors on 9th May 2017;

(f) Shareholding of Directors represents the shares held by them in individual capacity and excludes shares held as Trustees.

## 2.2 Changes in Board composition during the financial year 2017-18

During the year ended 31st March 2018, there were no changes in the Board composition other than as detailed below:

| Name | Category | Nature of change |
|---|---|---|
| P S Raghavan<br>Sujjain Suresh Talwar | Non-Executive & Independent Director | Appointed as Additional Directors by the Board on 9th May 2017. Their appointment as Independent Directors w.e.f. 9th May 2017 was approved by the shareholders at the 63rd Annual General Meeting held on 31st July 2017. |
| M A M Arunachalam | Promoter & Non-Executive Director | Appointed as an Additional Director by the Board on 28th October 2016. He was appointed as a Director at the 63rd Annual General Meeting held on 31st July 2017. |
| Mr. M Lakshminarayan | Non-Executive & Independent Director | Retired from the Board at the closing hours of 31st July 2017 on account of completion of his term as an Independent Director. |
| Mr. Shobhan M Thakore | Non-Executive & Independent Director | Retired from the Board at the closing hours of 31st July 2017 on account of completion of his term as an Independent Director. |

## 2.3 Board Meetings

The Board meets at regular intervals and has a formal schedule of matters reserved for its consideration and decision to ensure that it exercises full control over significant, strategic, financial, operational and compliance matters. These include setting performance targets, reviewing operational and financial performance against set targets, evolving strategy, approving investments, ensuring adequate availability of financial resources, overseeing risk management and reporting to the shareholders.

The Board is regularly briefed and updated on key business activities and is provided with presentations and information on the operations, financial performance and other matters concerning the Company. Besides, information on statutory compliance of applicable laws, minutes of meetings of the Committees of the Board, summary of decisions taken at the Board meetings of the subsidiary companies and information required under the Listing Regulations are provided to the Board on a quarterly basis. The Board periodically reviews the compliance of applicable laws and gives appropriate directions, wherever necessary. Timely and relevant information is provided by the Company to the Directors to facilitate effective participation and contribution during the meetings.

The Company has laid down procedures to inform the Board members about the risk assessment and minimisation procedures. The Board reviews the significant business risks identified by the Management and the mitigation process being undertaken.

The Board periodically reviews the matters required to be placed before it, monitors the overall performance of the Company and inter alia reviews and approves the quarterly financial statements, business plan, capital expenditure etc. The dates of the Board meetings are fixed in advance for the full calendar year to enable maximum attendance from the Board members. During the year ended 31st March 2018, six Board meetings were held on 9th May 2017, 31st July 2017, 1st November 2017, 13th February 2018, 14th February 2018 and 29th March 2018. As required under the Companies Act, 2013, the Company facilitates participation of a Director who is unable to attend the Board/Committee meetings physically, through video conference or other audio visual means in the manner prescribed under the relevant regulations.

During the year ended 31st March 2018, there was no Indian subsidiary Company which could be classified as material non-listed Indian subsidiary as per the terms of the Listing Regulations i.e., whose net worth exceeds 20% of the consolidated net worth of the Company or which has generated more than 20% of the consolidated income of the Company in the preceding financial year. The Board reviews the significant transactions and arrangements of the unlisted subsidiary companies besides being apprised of their business plan and performance. The Company has also formulated a policy for determining 'material subsidiaries' in line with the requirements of the Listing Regulations. A copy of the policy is available on the website of the Company and the link is *https://www.cumi-murugappa.com/policies.html.*

In line with the Companies Act, 2013 and the Listing Regulations, the Company has in place policies for determining 'materiality' for disclosure of events/information to stock exchanges, policy for preservation and archival of documents, dividend distribution policy, business responsibility policy and policy for prevention of sexual harassment at workplace.

The above policies are periodically reviewed by the Board.

### 2.4 Separate Meeting of Independent Directors

Besides the formal Board meetings, the Independent Directors hold meetings without the participation of Non-Independent Directors and members of the Management. During the year, the Independent Directors met on 29th March 2018 and reviewed the performance of Non-Independent Directors and the Board as a whole, reviewed the performance of the Chairman taking into account views of the Executive and Non-Executive Directors and also assessed the quality, quantity and timeliness of flow of information between the Management and the Board.

### 2.5 Board familiarisation

The members of the Board are provided with many opportunities to familiarise themselves with the Company, its Management and operations. At the time of appointing a Director, a formal letter of appointment is given to him/her, along with a Directors' handbook which inter alia explains the role, function, duties and responsibilities expected of him/her as a Director of the Company. The handbook also enumerates the list of compliance obligations and other disclosures required from the Director under the Companies Act, Listing Regulations and other relevant regulations. Newly inducted Audit Committee members are provided with an Audit Committee manual which broadly covers the regulatory scenario in India, current practices in the Company, Indian and Global best practices etc. These handbooks are updated periodically for regulatory as well as policy changes and updated copies of the handbooks are provided to all the Directors. Further, the Code of Conduct which includes the values, principles and beliefs guiding the Company and the duties and responsibilities of the Directors including an Independent Director is given to the Director at the time of induction as well as annually. In addition, the Board members have opportunity and access to interact with the Senior Management.

By way of an introduction to the Company, the newly inducted Director is presented with a corporate dossier which traces the Company's history over 60 years of its existence and gives a glimpse of value chain of its products. The Managing Director at the first Board meeting in which the new Director participates or at a mutually convenient time makes a detailed presentation on the Company, its various business segments and profile, manufacturing locations, organisation structure and other market related information. Exclusive plant visits are also organised for the new Director. Further, with a view to familiarise the existing Directors with the Company's operations on an ongoing basis, plant visits are periodically organised for the Directors. During the year, a visit of the facilities of the Company at Edapally and Kakkanad, Cochin was undertaken by the Board members on 13th February 2018. Further, as a part of their Board induction, Mr. P S Raghavan and Mr. Sujjain S Talwar visited the Company's facilities at Hosur, Tamil Nadu. In addition, Mr. Aroon Raman visited one of the facilities of the Company's joint venture - M/s Murugappa Morgan Thermal Ceramics Limited at Moti Bhayon, Ahmedabad and had interactions with the operating team. In the backdrop of a dynamic regulatory scenario, regulatory changes impacting the Company is briefed at meetings on quarterly basis.

The above initiatives help the Directors to understand the Company, its businesses and the regulatory framework in which the Company operates, thus enabling him/her to effectively fulfil their role as a Director of the Company. The details of the familiarisation programme is also uploaded and is available on the Company's website at the following link *https://www.cumi-murugappa.com/policies.html.*

### 2.6 Board evaluation

During the year, the Board conducted an evaluation of its own performance, individual Directors as well as the working of the Committees as per the Board evaluation framework adopted by it. The manner and criteria for the evaluation of the Directors including the Independent Directors of the Company is detailed in the Directors' Report.

## 3. Board Committees

The Board has constituted various Committees for support in discharging its responsibilities. There are five Committees constituted by the Board - Audit Committee, Nomination and Remuneration Committee, Risk Management Committee, Stakeholders Relationship Committee and Corporate Social Responsibility Committee. The Company Secretary acts as the Secretary to the Committees of the Board.

The Board at the time of constitution of each Committee determines the terms of reference and also delegates further powers from time to time. Various recommendations of the Committees are submitted to the Board for consideration & approval and the minutes of all meetings of the Committees are circulated to the Board for information.

In addition to the above, the Board from time to time constitutes committees of Directors for specific purposes. During the year, no meetings of such Committees were held.

### 3.1 Audit Committee

#### Terms of Reference

The role of the Audit Committee includes overseeing the financial reporting process and disclosure of financial information, review of financial statements before submission to the Board, review of adequacy of internal control system, findings of internal audit, whistle blower mechanism, related party transactions, scrutiny of inter-corporate loans & investments, approval and review of related party transactions, valuation of assets/undertakings of the Company, appointment of registered valuers etc., besides recommending the appointment of Auditors and their remuneration to the Board as well as approval of payments to Statutory Auditors for non-audit services and review of effectiveness of audit process. The Audit Committee also reviews the financial statements of unlisted subsidiary companies, in particular, the investments made by them.

#### Composition & Meetings

The Audit Committee comprises entirely Independent Directors and all members of the Committee are financially literate. The Chairman of the Board, the Statutory Auditor, Internal Auditor and members of the Management Committee are invited to attend all meetings of the Committee. The Cost Auditor is invited to attend meetings in which the Cost Audit Report is being considered. Further, as a good Corporate Governance practice, a separate discussion of the Committee with the Statutory Auditors and the Internal Auditors without the presence of the Management team is held periodically.

Considering Mr. M Lakshminarayan's retirement from the Board effective the closing hours of 31st July 2017, the Audit Committee was re-constituted by the Board with the induction of Mr. Sujjain S Talwar as a member on 9th May 2017.

During the year, the Committee had five meetings for reviewing the financial statements and considering the internal audit reports and audit plan.

The composition and attendance of the Committee members at the meetings held during the year are given below:

| Name of member | No. of meetings attended (No. of meetings held)* |
|---|---|
| T L Palani Kumar (Chairman) | 5 (5) |
| M Lakshminarayan | 2 (2) |
| Sanjay Jayavarthanavelu | 3 (5) |
| Bharati Rao | 3 (5) |
| Sujjain S Talwar | 4 (4) |

** Number of meetings held during tenor of membership in the Committee*

### 3.2 Nomination and Remuneration Committee

#### Terms of Reference

The role of the Committee is to (a) recommend to the Board the appointment of Directors (b) recommend re-election of Directors retiring by rotation (c) recommend the remuneration including pension rights and periodic increments of the Managing/Wholetime Director(s) (d) determine the annual incentive of the Managing/Wholetime Director(s) (e) recommend to the Board, the commission payable annually to each of the Non-Wholetime Directors, within the limits fixed by shareholders (f) formulate, implement, administer and superintend the Employee Stock Option Plan/Scheme(s) of the Company (g) formulating criteria for appointment of Directors and Senior Management and identification of persons who may be qualified to be appointed in these positions (h) devise policy on Board diversity (i) formulate criteria for evaluation of Independent Directors/Board, evaluation of the Directors' performance (j) recommend Remuneration policy to the Board (k) ensuring Board Diversity etc.

The Committee has formulated the criteria for determining the qualifications, positive attributes and independence of a Director and the criteria for Senior Management positions in terms of Section 178(3) of the Companies Act, 2013 besides laying down the criteria for Board evaluation. The Board evaluation including that of the Independent Directors is done based on the evaluation framework detailed elsewhere in the Directors' Report. The Company also has in place a Board approved policy on the remuneration for Directors, Key Managerial Personnel and other employees which had been duly recommended by the Committee. The policy is available in the link *https://www.cumi-murugappa.com/policies.html.*

#### Board Diversity Policy

The Company recognises and embraces the benefits of having a diverse Board and the Board diversity policy sets out the approach in this regard. A truly diverse Board comprising of appropriately qualified people with a broad range of experience relevant to the business of the Company, is integral to its success and is also an essential element in maintaining a competitive advantage on a sustainable basis. In line with the policy, the Board is balanced by members having complementary knowledge, expertise and skills in areas such as business strategy, finance, foreign affairs, legal, marketing, manufacturing, technology and such other areas that the Board considers desirable.

### Criteria for Board Nomination

The Nomination and Remuneration Committee is responsible for identifying persons for initial nomination as Directors as well as evaluating incumbent Directors for their continued service. The Committee has formulated a criteria in terms of Section 178 of the Companies Act, 2013 and the Listing Regulations inter alia detailing the qualifications in terms of personal traits, experience & background, fit & proper, positive attributes and independence standards to be considered for nominating candidates for Board positions/ re-appointment of Directors.

### Criteria for Senior Management

The Nomination and Remuneration Committee is also responsible for identifying persons who are qualified to be appointed in Senior Management. The Committee has formulated a criteria in terms of personal traits, competencies, experience & background, etc. to be considered for nominating candidates to Senior Management positions.

### Composition & Meetings

The Committee comprises three members with all of them being Independent Directors. With the changes in the composition of the Board on account of the retirement of Mr. M Lakshminarayan and Mr. Shobhan M Thakore from the Board effective the closing hours of 31st July 2017, the Nomination and Remuneration Committee was re-constituted during the year. Mr. Aroon Raman and Mr. Sanjay Jayavarthanavelu were inducted as members of the Committee on 9th May 2017.

The Committee met on three occasions during the year. The composition and attendance of Committee members are given below:

| Name of Member | No. of meetings attended (No. of meetings held)* |
|---|---|
| M Lakshminarayan (Chairman till 31st July 2017) | 2 (2) |
| T L Palani Kumar (Chairman from 1st August 2017) | 3 (3) |
| Shobhan M Thakore | 2 (2) |
| Sanjay Jayavarthanavelu | 1 (2) |
| Aroon Raman | 1 (2) |

** Number of meetings held during tenor of membership in the Committee*

## 3.3 Risk Management Committee

### Terms of Reference

The Board has constituted a Risk Management Committee for monitoring the risk management process in the Company.

The role of this Committee is to review the annual risk management framework to ensure that they are comprehensive & well developed, to periodically review the process for systematic identification and assessment of the business risks, to assess the critical risk exposures by specialised analysis and quality reviews and report to the Board the details of any significant developments relating to these and the steps being taken to manage the exposures, identify and make recommendations to the Board, to the extent necessary on resources action and staffing required for effective risk management.

As a part of review of the risk management framework undertaken during the year, the Committee formulated a risk management policy with the following key objectives:

- Strengthening the business performance by informed decision making and planning.
- Adding sustainability value to the activities of the Company.
- Enhancing risk awareness amongst employees.
- Having in place an early warning mechanism for identification of threats/opportunities.
- Enabling optimum resources allocation and efficient use.
- Promoting an innovative culture with proper understanding of risks.

### Composition & Meetings

The Committee comprises two Independent Directors and the Managing Director. The Management Committee members comprising the Senior Management executives are invited to the Committee meetings.

Consequent to changes in the composition of the Board on account of the retirement of Mr. M Lakshminarayan effective the closing hours of 31st July 2017, the Risk Management Committee was re-constituted by the Board with the induction of Mr. P S Raghavan and Mr. Aroon Raman as members on 9th May 2017.

The Committee met on two occasions during the year. The composition and attendance of Committee members are given below:

| Name of Member | No of meetings attended (No. of meetings held) |
|---|---|
| P S Raghavan (Chairman) | 2 (2) |
| Aroon Raman | 2 (2) |
| K Srinivasan | 2 (2) |

## 3.4. Stakeholders Relationship Committee

### Terms of Reference

The terms of reference of this Committee includes formulation of investors' servicing policies, review of redressal of investors complaints and approval/overseeing of transfers, transmissions, transpositions, splitting, consolidation of securities, issue of certificates, demat/remat requests, finalisation of terms of issue of debt instruments including debentures, approval of their allotment, administering the unclaimed shares suspense account, authorising the terms of various borrowings & creating security in respect thereof, allotment of shares on exercise of Options by employees under the Employees Stock Option Scheme/plan and performing other functions as delegated to it by the Board from time to time.

### Composition & Meetings

During the year, the Stakeholders Relationship Committee was re-constituted by the Board with the induction of Mr. M A M Arunachalam as a member on 9th May 2017.

The Committee met on four occasions during the year.

The composition and attendance of Committee members are given below:

| Name of Member | No of meetings attended (No. of meetings held)* |
|---|---|
| M M Murugappan (Chairman) | 4 (4) |
| M A M Arunachalam | 3 (3) |
| K Srinivasan | 4 (4) |

* *Number of meetings held during tenor of membership in the Committee*

During the year, there was one investor service complaint pertaining to dematerialisation of shares which was resolved to the satisfaction of the shareholder. There were no investor service complaints pending as at 31st March 2018.

Ms. Rekha Surendhiran, Company Secretary continues to be the Compliance Officer for the purpose of compliance with the requirements of the Listing Regulations.

Karvy Computershare Private Limited, Hyderabad, is the Company's Registrar and Share Transfer Agent (RTA). The contact details are available in the General Shareholder Information section of the Report.

### 3.5 Corporate Social Responsibility Committee

#### Terms of Reference

The Board has constituted a Corporate Social Responsibility (CSR) Committee in line with the requirements of the Companies Act, 2013 for assisting the Board in discharging its corporate social responsibility. The Board has approved a CSR policy formulated and recommended by the Committee which is uploaded and available on the Company's website at the following link *https://www.cumi-murugappa.com/policies.html.* The functions of the Committee include recommending the amount of expenditure to be incurred on the CSR activities, monitoring the implementation of CSR activities as per the CSR policy of the Company from time to time etc.

#### Composition & Meetings

The Committee comprises two Independent Directors and the Managing Director as its members. The Management Committee members are invited to the Committee meetings.

The Committee met on two occasions during the year. During the year, owing to the changes in the composition of the Board on account of the retirement of Mr. Shobhan M Thakore effective the closing hours of 31st July 2017, the CSR Committee was re-constituted with the induction of Mr. P S Raghavan as a member of the Committee on 9th May 2017. The composition and attendance of Committee members are as follows:

| Name of Member | No. of meetings attended (No. of meetings held)* |
|---|---|
| Shobhan M Thakore (Chairman till 31st July 2017) | 1 (1) |
| Aroon Raman (Chairman from 1st August 2017) | 2 (2) |
| P S Raghavan | 1 (1) |
| K Srinivasan | 2 (2) |

* *Number of meetings held during tenor of membership in the Committee*

## 4. DIRECTORS' REMUNERATION

### 4.1 Policy

The ability to attract and retain talented and quality resources is a significant characteristic of any successful organisation. The Company's Remuneration policy formulated by the Nomination and Remuneration Committee provides the framework for remuneration of the Board members as well as all employees including the Key Managerial Personnel. This policy is guided by the principles and objectives as enumerated in Section 178 of the Companies Act, 2013 and Listing Regulations to ensure reasonableness and sufficiency of remuneration to attract, retain and motivate competent resources, a clear relationship of remuneration to performance and a balance between rewarding short and long-term performance of the Company.

The compensation of the Managing Director comprises a fixed component and a performance incentive based on certain pre-agreed parameters. The compensation is determined based on levels of responsibility and scales prevailing in the industry. The Managing Director is not paid sitting fees for any Board/Committee meetings attended by him. The Managing Director is also eligible for employee Stock Options.

Equity based compensation is considered to be an integral part of employee compensation across various sectors which enables alignment of personal goals of employees with organisational objectives. Under the Employee Stock Option Scheme 2007, the Managing Director was granted Options, the summary of which is given in this report. No fresh grants were made under the above scheme during the year. During the year 2016-17, Mr. K Srinivasan, Managing Director was granted 370,400 Stock Options under the Employee Stock Option Plan 2016 (ESOP 2016). However, Mr. K Srinivasan offered to surrender the Options granted to him under ESOP 2016 with an intention to make the same available for the other eligible employees of the Company at an appropriate time. Respecting his views, the Nomination and Remuneration Committee considered his request for surrender of 370,400 Options under ESOP 2016 and approved the cancellation of the same during the year.

The compensation to the Non-Executive Directors takes the form of commission on profit. Though shareholders have approved payment of commission up to 1 per cent of net profit of the Company for each year, the actual commission paid to the Directors is restricted to a fixed sum within the above limit. This sum is reviewed periodically taking into consideration various factors such as performance of the Company, time spent by the Directors for attending to the affairs and business of the Company and extent of responsibilities cast on Directors under general law and other relevant factors.

In keeping with evolving trends in industry, the practice of paying differential commission to Directors based on time and efforts spent by them has also been adopted. Given the size and nature of its operations and also the rich experience that Mr. M M Murugappan, Chairman possesses in the field of engineering, a considerable amount of time is spent by him in connection with the operations of the Company. Apart from playing an active role in guiding and advising on matters connected with strategy and management, he spends considerable time on developing/managing relationships with the Company's business partners both in India and overseas. The Chairman also plays an active role in matters connected with CUMI's organisation culture which is critical for the Company to deliver superior performance besides devoting time for technology related issues impacting the Company. Further, the Chairman spends a lot of time participating in various events, conclaves and functions of Industry bodies, Academic Institutions and interactions with high level State Authorities representing the Company. Under his chairmanship, the Company has grown globally from ₹4060 million to over ₹23000 million.

The Non-Executive Directors are also paid sitting fees within the limits prescribed under the Companies Act, 2013 for every Board/Committee meetings attended by them.

### 4.2 Remuneration for FY 2017-18

#### Non-Executive Directors

₹ million

| Name | Sitting Fees | Commission @ |
|---|---|---|
| M M Murugappan | 0.21 | 10.00 |
| T L Palani Kumar | 0.32 | 0.75 |
| Sanjay Jayavarthanavelu | 0.19 | 0.75 |
| Aroon Raman | 0.20 | 0.75 |
| Bharati Rao | 0.18 | 0.75 |
| M A M Arunachalam | 0.19 | 0.75 |
| P S Raghavan | 0.17 | 0.67 |
| Sujjain Suresh Talwar | 0.25 | 0.67 |
| M Lakshminarayan* | 0.13 | 0.25 |
| Shobhan M Thakore* | 0.10 | 0.25 |
| **Total** | **1.94** | **15.59** |

@ will be paid after adoption of accounts by shareholders at the 64th Annual General Meeting.

* retired from the Board effective closing hours of 31st July 2017.

#### Managing Director

₹ million

| Name | K Srinivasan (a) | Amount |
|---|---|---|
| Fixed Component | Salary & Allowances | 13.67 |
| | Retirement benefits* | 3.45 |
| | Perquisites | 0.03 |
| Variable Component | Incentive(a) | 5.08 |

*includes contribution to National Pension System of PFRDA.

(a) Represents incentive paid during the financial year 2017-18 in respect of the financial year 2016-17

(b) As per the terms of his remuneration, the Managing Director is eligible for an annual incentive based on a balanced scorecard which comprises Company financials, Company scorecard and personal objectives. For the financial year 2017-18, a sum of ₹5.72 million has been provided in the accounts for this purpose. The actual amount will be decided by the Nomination and Remuneration Committee in August 2018.

(c) With respect to the Employee Stock Options granted to the employees under the Employees Stock Option Scheme, 2007 and the Employee Stock Option Plan 2016, the Options are accounted based on fair value, as prescribed by the Indian Accounting Standards (IND AS). No Stock Options were granted to Mr. K Srinivasan under the Employee Stock Option Scheme, 2007 (grants discontinued since February 2012). During the year, no Options were granted to Mr. K Srinivasan under the Employee Stock Option Plan 2016. However, based on the request from Mr. K Srinivasan to surrender 370,400 Options granted to him on 4th February 2017 at ₹257.55/- being the market price prior to date of grant, the Nomination and Remuneration Committee considered and approved the cancellation of these Options. As required under Listing Regulations, the details of the Options granted to and held by Mr. K Srinivasan under Company's ESOP Scheme 2007 are given below:

| Particulars | No. of Options | Exercise price |
|---|---|---|
| Options granted | 443,800 | ₹91.80/- being the market price prior to the date of grant |
| Options vested | 443,800 | |
| Options cancelled | 66,570 | |
| Options lapsed | - | |
| Options exercised | 377,230 | |
| Options outstanding | - | |

As on 31st March 2018, there are no outstanding Options granted to Mr. K Srinivasan, Managing Director.

## 5. GENERAL BODY MEETINGS

### 5.1 Last three Annual General Meetings

| Financial Year | Date | Time | Venue |
|---|---|---|---|
| 2014-15 | 03.08.2015 | 3.00 PM | TTK Auditorium, Music Academy, 168 (Old No.306) TTK Road, Royapettah, Chennai 600014 |
| 2015-16 | 03.08.2016 | | |
| 2016-17 | 31.07.2017 | | |

### 5.2 Special Resolutions passed during the last three Annual General Meetings

| Sl. No. | Item of business | Passed on |
|---|---|---|
| 1. | Approval of offer/invitation to subscribe to Non-Convertible Debentures up to ₹2500 million on Private Placement basis. | 03.08.2015 |
| 2. | Approval of offer/invitation to subscribe to Non-Convertible Debentures up to ₹2500 million on Private Placement basis. | 03.08.2016 |
| 3. | Approval of offer/invitation to subscribe to Non-Convertible Debentures up to ₹2500 million on Private Placement basis. | 31.07.2017 |

### 5.3 Postal Ballot

During the year, there were no resolutions passed through postal ballot and as at the year end, there are no proposals to pass special resolutions through postal ballot except those requiring to be passed pursuant to the Companies Act, 2013 which will be done after providing adequate notice to the shareholders.

## 6. WHISTLE BLOWER POLICY/VIGIL MECHANISM

The Company has established a whistle blower mechanism to provide an avenue to raise concerns, if any, in line with the Company's commitment to the high standards of ethical, moral and legal conduct of business. The mechanism also provides for adequate safeguards against victimisation of employees who avail of the mechanism and also for appointment of an Ombudsperson who will deal with the complaints received. The policy also lays down the process to be followed for dealing with complaints and in exceptional cases, also provides for direct appeal to the Chairperson of the Audit Committee. In line with the requirements of the Companies Act, 2013, the policy coverage extends to the Directors of the Company and the Ombudsman for dealing with any referrals made by Board members is the Chairman of the Audit Committee. The Whistle blower policy is available on the Company's website at the following link *https://www.cumi-murugappa.com/policies.html.* It is affirmed that during the year, no employee was denied access to the Audit Committee.

## 7. PREVENTION OF INSIDER TRADING

The Company has adopted a Code of Conduct for Prevention of Insider Trading with a view to regulate trading in securities by the Directors and designated employees of the Company. The Code requires pre-clearance for dealing in the Company's shares for all transactions by Directors and designated employees (together called Designated Persons) and prohibits the purchase or sale of Company's securities by Designated Persons while in possession of unpublished price sensitive information in relation to the Company. Further, trading in securities is also prohibited for Designated Persons during the period when the Trading Window is closed. The Company Secretary is responsible for implementation of the Code. During the year, the Company has established an online system for monitoring the compliance of the Code by its designated employees The Company also has in place a Code for practices and procedures for fair disclosure of unpublished price sensitive information which is available on the website of the Company.

## 8. DISCLOSURES

During the year, there were no material transactions with Related Parties. The Company has devised a policy on dealing with Related Party Transactions and the same is available in the website of the Company in the link *https://www.cumi-murugappa.com/policies.html.* The disclosures relating to commodity price risks/foreign exchange risk and hedging activities of the Company have been made in the Directors' Report. The requirements of Regulation 17 to Regulation 27 of the Listing Regulations and clauses (b) to (i) of Regulation 46(2) to the extent applicable to the Company have been complied with as disclosed in this Report. Further, there were no instances of non-compliance by the Company nor were there any penalties or strictures imposed on the Company by the stock exchange, SEBI or any statutory authority on any matter related to capital markets in the preceding three years.

## 9. MEANS OF COMMUNICATION

Your Company recognises the significance of dissemination of timely and relevant information to shareholders. In order to enable the stakeholders to understand the financial results in a meaningful manner, the Company gives a press release along with the publication of quarterly/ annual financial results. The quarterly unaudited financial results and the annual audited financial results are normally published in Business Standard (in English) and Makkal Kural (in Tamil). Press releases are given to all important dailies. The financial results, press releases and presentations made to institutional investors/ analysts are posted on the Company's website i.e. *https://www.cumi-murugappa.com.*

## 10. MANAGEMENT DISCUSSION & ANALYSIS

In order to avoid duplication and overlap between the Directors Report and a separate Management Discussion & Analysis (MD&A), the information required to be provided in the MD&A has been given in the Directors' Report itself as permitted by the Listing Regulations.

## 11. NON-MANDATORY REQUIREMENTS

The quarterly financial results are published in leading financial newspapers, uploaded on the Company's website, and any major developments are conveyed in the press releases issued by the Company and posted on the Company's website. The Company therefore did not send the half yearly performance update individually to the shareholders of the Company.

The expenses incurred by the Chairman in performance of his duties are reimbursed.

As recommended in Part E of Schedule II to Regulation 27(1) of the Listing Regulations, the post of Chairperson and Managing Director are held by separate persons.

During the year, the Internal Auditor/Statutory Auditor have had separate discussions with the Audit Committee without the presence of the Management team.

Further, there are no qualifications or adverse remarks by the Company's Auditors in the Company's Financial Statements and the Secretarial Audit Report for the FY 2017-18.

Other non-mandatory requirements have not been adopted at present.

## 12. CEO/CFO CERTIFICATION

Mr. K Srinivasan, Managing Director has given a certificate to the Board on matters relating to financial reporting, compliance with relevant statutes and adequacy of internal control systems as contemplated in Regulation 17(8) read with Part B of Schedule II of the Listing Regulations. During the year, Mr. Sridharan Rangarajan stepped down as the Chief Financial Officer (CFO) of the Company with effect from the closing hours of 17th January 2018 considering his taking up the role of Group-CFO of the Murugappa Group. The position of the Chief Financial Officer is vacant since then and the Company having identified suitable candidate(s) is in the process of filling up the vacancy.

## 13. PRACTISING COMPANY SECRETARY'S CERTIFICATE ON CORPORATE GOVERNANCE

The certificate from a Practising Company Secretary on Corporate Governance is annexed.

## 14. GENERAL SHAREHOLDER INFORMATION

A separate section in this regard is annexed and forms part of this Report.

## 15. SHAREHOLDERS SATISFACTION SURVEY

An online survey is posted on the Company's website at the following link *https://www.cumi-murugappa.com/survey/index.php.*

Shareholders who have not yet submitted the survey can go to the above link and take part in the survey. We request the shareholders who have not yet participated in the survey to use this link and provide us their valuable feedback.

## 16. INSTRUCTIONS TO SHAREHOLDERS

Shareholders holding shares in physical form are requested to address their communications regarding change in address/ contact details by quoting their folio number to the Company's RTA or to the Company by e-mailing to investorservices@cumi@murugappa.com Shareholders holding shares in electronic form may send their communications regarding the above to their respective Depository Participants.

Shareholders are encouraged to avail nomination facility and approach RTA or their Depository Participant in this regard.

Shareholders are requested to register their e-mail ID with the RTA/ Depository Participant to enable the Company to send communications electronically.

Members are advised to intimate the details of their bank account to enable electronic remittance of dividend or alternatively for being incorporated in the dividend warrants. This would help to avoid fraudulent encashment of dividend warrants.

In case of members holding shares in physical form, all intimations are to be sent to Karvy Computershare Private Limited, (Unit: Carborundum Universal Limited), Karvy Selenium Tower B, Plot 31-32, Gachibowli, Financial District, Nanakramguda, Hyderabad - 500 032 the Registrars and Share Transfer Agent (RTA) of the Company.

In case of members holding shares in demat form, all intimations are to be sent to their respective Depository Participants (DPs). Shareholders may contact the Secretarial team in case of any query regarding their holdings in the Company.

On behalf of the Board

Chennai
May 4, 2018

**M M Murugappan**
*Chairman*

# General Shareholder Information

## A. Corporate Information

### 1. Registered office

Parry House, 43, Moore Street, Chennai 600 001.
Tel No.:+91-44-30006161; Fax.:+91-44-30006149;
Email: cumigeneral@cumi.murugappa.com
Website: www.cumi-murugappa.com

### 2. Corporate Identity Number

L29224TN1954PLC000318

### 3. Auditors

#### Statutory Auditor

Price Waterhouse Chartered Accountants LLP,
8th Floor, Prestige Palladium Bayan,
129-140, Greams Road, Chennai 600006.

#### Cost Auditor

S Mahadevan & Co., Chennai, Cost Accountants,
No.1, 'Lakshmi Nivas', K.V. Colony, Third Street,
West Mambalam, Chennai 600 033.

#### Internal Auditor

Ernst & Young LLP, Chartered Accountants,
6th & 7th Floor, A Block, Tidel Park,
4, Rajiv Gandhi Salai, Taramani, Chennai 600 113.

#### Secretarial Auditor (for the FY 2017-18)

R Sridharan & Associates, Company Secretaries,
New No. 5, (Old No. 12), Sivasailam Street,
T Nagar, Chennai 600 017.

### 4. Address for correspondence

#### Compliance Officer

Rekha Surendhiran, Company Secretary,
Carborundum Universal Limited,
Parry House, 43, Moore Street, Chennai 600 001.
Tel: +91-44-30006141; Fax: +91-44-30006149;
E-mail: rekhas@cumi.murugappa.com

#### Investor Relationship Officer

Janani T A,
Carborundum Universal Limited,
Parry House, 43, Moore Street, Chennai 600 001;
Tel: +91-44-30006166; Fax: +91-44-30006149;
E-mail: investorservices@cumi.murugappa.com

### 5. Registrar and Share Transfer Agent

Karvy Computershare Private Limited,
Unit: Carborundum Universal Limited,
Karvy Selenium Tower B, Plot 31-32, Gachibowli,
Financial District, Nanakramguda, Hyderabad 500 032.
Tel: +91-40-67162222; Fax: +91-040-23420814;
Toll Free no.: 1800-345-4001;
E-mail: einward.ris@karvy.com; Website: www.karvy.com;
Contact Person: Mrs. Varalakshmi P - Asst. General Manager.

### 6. Financial Year

1st April to 31st March

### 7. Dates of Book Closure

Friday, 27th July 2018 to Friday, 3rd August 2018

## 8. Cost Audit Report

The Cost Audit report for financial year 2016-17 had been duly filed on 24th August 2017 through XBRL mode as mandated by the Ministry of Corporate Affairs within the due date. The due date for filing of Cost Audit report for the financial year 2017-18 is 30th September 2018.

## 9. Plant Locations

### i. Plant locations of Carborundum Universal Limited

(a) 655, Thiruvottiyur High Road, P B No. 2272, Tiruvottiyur, Chennai - 600019 Tamil Nadu.

(b) Plot No.48, SIPCOT Industrial Complex, Hosur - 635126, Krishnagiri District, Tamil Nadu.

(c) Gopalpur Chandigarh, P.O. Ganga Nagar, Kolkata 700132, West Bengal.

(d) C-4 & C-5, Kamarajar Salai, MMDA Industrial Complex, Maraimalai Nagar - 603209 Kancheepuram District, Tamil Nadu.

(e) F-1/2, F2 - F5, SIPCOT Industrial Park, Pondur "A" Village, Sriperumbudur - 602105. Kanchipuram District, Tamil Nadu.

(f) K3, ASAHI Industrial Estate, Latherdeva Hoon, Mangalore Jhabrera Road, PO Jhabrera Tehsil Roorkee, Haridwar District, Uttarakhand - 247667.

(g) PB No.1 Kalamassery, Development Plot P.O, Kalamassery 683109, Ernakulam District, Kerala.

(h) PB No.3 Nalukettu, Koratty 680308, Trichur District, Kerala.

(i) Bhatia Mines, Bhatia Western Railway, Jamnagar District, Gujarat 361315.

(j) P.B No.2 Okha Port P.O., Jamnagar District, Gujarat 361350.

(k) Plot No.7 & 18, Cochin Special Economic Zone (CSEZ), Kakkanad 682037, Kochi, Kerala.

(l) Maniyar Hydroelectric Works, Maniyar P.O. Vadasserikara, Pathanamthitta District, Kerala 689662.

(m) Plot No.8, Carborundum Universal SEZ, K.D.Plot, Kochi, Kerala.

(n) Plot No.2 & 3, Carborundum Universal SEZ, K.D.Plot, Kochi, Kerala.

(o) Plot No.4, Carborundum Universal SEZ, K.D. Plot, Kochi, Kerala.

(p) Plot No.47, SIPCOT Industrial Complex, Hosur - 635126 Krishnagiri District, Tamil Nadu.

(q) Super Refractories Division, Plot No.102 & 103, SIPCOT Industrial Complex (Phase II), Ranipet 632403, Tamil Nadu.

(r) Super Refractories Division - Plant 2, Serkaddu Village, Vinnampalli Post, Katpadi Taluk, Vellore District - 632516, Tamil Nadu.

(s) Plot nos. 35, 37, 48-51, Adhartal Industrial Estate, Jabalpur - 482004, Madhya Pradesh.

### ii. Plant locations of Subsidiaries/Joint Ventures

(a) Sterling Abrasives Ltd., Plot No.45/46 & Plot No.501, G I D C Estate, Odhav Road, Ahmedabad - 382415, Gujarat, India.

(b) Sterling Abrasives Ltd., Plot No 501, Near Anup Engineering, G.I.D.C., Odhav Road, Ahmedabad - 382415. Gujarat. India.

(c) Southern Energy Development Corporation Ltd., Plot no.29, Nallur PO, Aadichapuram, (Via) Mannargudi Taluk, Tiruvarur District - 614717, Tamil Nadu, India.

(d) Murugappa Morgan Thermal Ceramics Ltd., Plot No.26 & 27, SIPCOT Industrial Complex, Ranipet - 632403, Tamil Nadu, India.

(e) Murugappa Morgan Thermal Ceramics Ltd., Plot No.681, Moti Bhoyan Village, Sanand-Kalol Highway, Kalol Taluk, Gandhinagar, Dist., Gujarat - 382721, India.

(f) Wendt (India) Ltd., 69/70, SIPCOT Industrial Complex, Hosur - 635126, Krishnagiri District, Tamil Nadu, India.

(g) Volzhsky Abrasive Works, 404130 Volzhsky, Volgograd Region, 6th Autodoroge, 18, Russia.

(h) Foskor Zirconia (Pty.) Ltd., 27 Selati Road, Phalaborwa, South Africa, 1389.

(i) CUMI Australia Pty Ltd., 29 Gipps St, Carrington, NSW, 2294, Postal Address: PO Box 142, Carrington, NSW, 2294.

(j) CUMI Australia Pty Ltd., 1/253 Beringarra Ave, Malaga, WA 6944, Postal Address: PO Box 2538, Malaga, WA 6944.

(k) CUMI Australia Pty Ltd., 20, Waurn St, North Rockhampton, QLD 4701, Postal Address: PO Box 6494, Central QLD Mail Centre, Rockhampton, QLD 4702.

(l) Wendt Grinding Technologies Ltd. 109/21 Moo 4, Eastern Seaboard Industrial Estate (Rayong), Tambol Pluakdaeng, Amphur Pluakdaeng, Rayong 21140, Thailand.

## B. STOCK MARKET INFORMATION

### 1. Listing on stock exchanges and stock code

| Stock Exchange | Stock Code |
|---|---|
| National Stock Exchange of India Ltd. Exchange Plaza, Bandra-Kurla Complex, Bandra (E), Mumbai 400 051 | CARBORUNIV |
| BSE Ltd. Phiroze Jeejeebhoy Towers, Dalal Street, Mumbai 400 001 | 513375 |

Annual listing fees has been paid to the above stock exchanges.

The International Securities Identification Number (ISIN): INE120A01034

### 2. Depositories Connectivity

The Company has signed agreements with the following depositories to provide the facility of holding equity shares in dematerialised form:

| | |
|---|---|
| National Securities Depository Ltd. (NSDL) | www.nsdl.co.in |
| Central Depository Services (India) Ltd. (CDSL) | www.cdslindia.com |

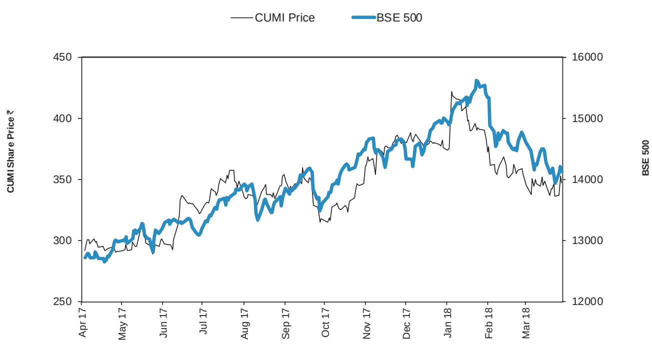
## 3. Share price information

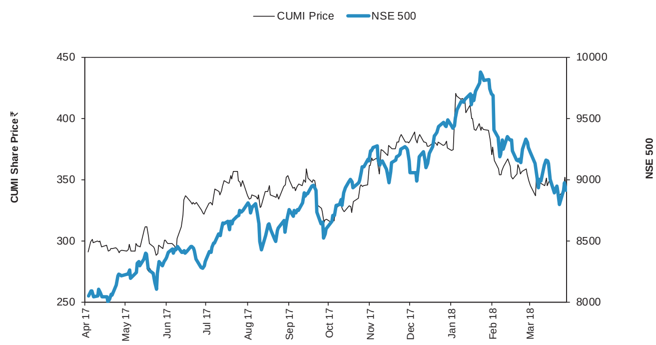
### a) Monthly market price data

| Month | BSE Limited | | | National Stock Exchange of India Limited | | |
|---|---|---|---|---|---|---|
| | High ₹ | Low ₹ | Traded Volume (No. of shares) | High ₹ | Low ₹ | Traded Volume (No. of shares) |
| April 2017 | 305.40 | 288.00 | 580921 | 306.00 | 288.40 | 1882888 |
| May 2017 | 317.00 | 285.65 | 1318269 | 317.00 | 285.00 | 3405224 |
| June 2017 | 340.00 | 291.75 | 409194 | 340.00 | 292.00 | 2773633 |
| July 2017 | 364.80 | 325.40 | 671004 | 365.00 | 324.10 | 1803712 |
| August 2017 | 360.15 | 320.80 | 1512506 | 362.00 | 321.95 | 2663535 |
| September 2017 | 363.75 | 311.95 | 562887 | 362.90 | 313.00 | 1962763 |
| October 2017 | 368.50 | 312.35 | 816823 | 369.00 | 313.85 | 4223462 |
| November 2017 | 392.35 | 350.90 | 748364 | 392.25 | 351.30 | 2924652 |
| December 2017 | 395.00 | 362.15 | 236720 | 395.80 | 369.00 | 1774705 |
| January 2018 | 428.00 | 368.00 | 782085 | 427.00 | 367.15 | 3291639 |
| February 2018 | 395.00 | 333.00 | 1259002 | 382.00 | 341.00 | 1882934 |
| March 2018 | 354.00 | 331.30 | 3382258 | 354.70 | 332.20 | 2288908 |

### b) Performance in comparison with BSE 500 and NSE 500

Stock market snapshot of CUMI Price v/s BSE 500 and NSE 500 during 1st April 2017 to 31st March 2018 is given below:




## C. OTHER INFORMATION

### 1. SHARE CAPITAL DETAILS

#### (a) Outstanding shares

The total number of outstanding shares as on 31st March 2018 is 188,955,751. All the shares have been fully paid up. As on 31st March 2018, 188,955,751 equity shares constituting 98.45% of the total paid up capital of the Company have been dematerialised.

#### (b) Shareholding Pattern/Distribution as on 31st March 2018

#### (i) Shareholding Pattern

| Category | % to total paid up Capital |
|---|---|
| Promoter/Promoter Group | 42.42 |
| Foreign Institutional Investors | 4.62 |
| Financial Institutions including Insurance Companies | 2.59 |
| Non-resident (NRI's/OCBs/FIIs) | 1.65 |
| Mutual Funds | 20.98 |
| Banks | 0.04 |
| Indian Bodies Corporate | 6.28 |
| Individuals | 20.97 |
| Others - Trusts/Clearing Members | 0.45 |
| **Total** | **100.00** |

#### (ii) Distribution of Shareholding

| Sl. No. | Category (Shares) | No. of holders | % to holders | No. of Shares | % to Equity |
|---|---|---|---|---|---|
| 1. | 1 - 100 | 13033 | 47.25 | 483079 | 0.26 |
| 2. | 101 - 200 | 2682 | 9.72 | 471683 | 0.25 |
| 3. | 201 - 500 | 3642 | 13.20 | 1371136 | 0.73 |
| 4. | 501 - 1000 | 2748 | 9.96 | 2231263 | 1.18 |
| 5. | 1001 - 5000 | 4128 | 14.97 | 10245642 | 5.42 |
| 6. | 5001 - 10000 | 680 | 2.47 | 4979344 | 2.63 |
| 7. | 10001 and above | 669 | 2.43 | 169173604 | 89.53 |
| | **Total** | **27582** | **100.00** | **188955751** | **100.00** |

## 2. Outstanding GDR/ADR/Warrants etc.

Under the CUMI Employees Stock Option Scheme, 2007, the following Stock Options are outstanding as on 31st March 2018:

| Sl. No. | Grant Date | Exercise Price in (₹) | Net Outstanding Options (a) | Likely impact on full exercise | |
|---|---|---|---|---|---|
| | | | | Share Capital ₹ million | Share Premium ₹ million |
| 1 | 29-Sep-07 | 91.80 | - | - | - |
| 2 | 24-Jul-08 | 61.40 | 2,052 | 0.00 | 0.13 |
| 3 | 27-Jan-11 | 125.08 | 275,456 | 0.28 | 34.18 |
| 4 | 27-Jan-11 | 125.08 | 111,416 | 0.11 | 13.82 |
| 5 | 05-Aug-11 | 146.00 | 190,080 | 0.19 | 27.56 |
| 6 | 04-Feb-12 | 155.00 | 76,812 | 0.08 | 11.83 |
| **Total** | | | **655,816** | **9.66** | **87.52** |

Under the CUMI Employee Stock Option Plan 2016, the details of stock Options granted and outstanding are as follows:

| Sl. No. | Grant Date | Exercise Price in (₹) | Net Outstanding Options (a) | Likely impact on full exercise | |
|---|---|---|---|---|---|
| | | | | Share Capital ₹ million | Share Premium ₹ million |
| 1 | 04-Feb-17 | 257.55 | 534,326* | 0.53 | 137.08 |
| 2 | 14-Feb-18 | 367.20 | 50,870 | 0.05 | 18.63 |
| 3 | 14-Feb-18 | 367.20 | 19,344 | 0.02 | 7.08 |
| **Total** | | | **604,540** | **0.60** | **162.7** |

**Note:**

(a) In respect of the Options referred in serial number 4 above of the Employee Stock Option Scheme 2007, each Option gives a right to the holder to subscribe to one equity share of ₹1 each, within 3 years from the date of vesting, in respect of 50 per cent of the first tranche and 6 years from the date of vesting in respect of the remaining 50 per cent of the first tranche and all subsequent tranches. The vesting of Options granted, is based on the annual performance rating and as per the following schedule - 40% on expiry of the first year from the date of grant and 30% each on expiry of the second and third years from the date of grant.

b) In respect of all other Options granted under the Employee Stock Option Scheme 2007, each Option gives a right to the holder to subscribe to one equity share of ₹1/- each, within 3 years from the date of vesting in respect of the first tranche and 6 years from the date of vesting in respect of subsequent tranches. The vesting of Options, is based on the annual performance rating and as per the following schedule - 20% each on expiry of the first and second year from the date of grant and 30% each on expiry of third and fourth year from the date of grant.

c) In respect of Options referred in serial number 1 and 2 above of the Employee Stock Option Plan 2016, each Option gives a right to the holder to subscribe to one equity share of ₹1/- each, within 5 years from the date of vesting. The vesting of Options, is based on the annual performance rating and as per the following schedule - 20% each on expiry of the first and second year from the date of grant and 30% each on expiry of third and fourth year from the date of grant.

d) In respect of Options referred in serial number 3 above of the Employee Stock Option Plan 2016, each Option gives a right to the holder to subscribe to one equity share of ₹1/- each, within 5 years from the date of vesting. The vesting of Options, is based on the annual performance rating and as per the following schedule - 25% each on expiry of the first year from the date of grant and 37.50% each on expiry of second and third year from the date of grant.

Other than the above, there are no outstanding GDRs or ADRs or convertible instruments.

* excludes 370,400 Options cancelled during the year.

## 3. Share Transfer Process

The applications for transfer of shares and other requests from shareholders holding shares in physical form are processed by Karvy Computershare Private Ltd., Company's Registrar and Share Transfer Agent. The Board has delegated the power to approve transfers to the Stakeholders Relationship Committee. In respect of requests for transfer of shares upto 5000, the approving authority is the Managing Director and Company Secretary. In respect of transmission of shares, all requests are considered for approval by the Stakeholders Relationship Committee.

## 4. Unclaimed Shares

| Particulars | No. of Share holders | No. of Shares |
|---|---|---|
| Aggregate number of shareholders and the outstanding shares lying in the Unclaimed Suspense Account at the beginning of the year | 521 | 746,250 |
| Number of Shareholders whose shares have been transferred during the year from the Unclaimed Suspense Account to the Investor Education and Protection Fund Authority pursuant to Section 124(6) of the Companies Act, 2013* | 321 | 400,380 |
| Number of Shareholders who approached the Company for transfer of shares from the Unclaimed Suspense Account during the year in response to the Company's reminders | 14 | 56,250 |
| Number of shareholders to whom shares were transferred from the Unclaimed Suspense Account during the year | 14 | 56,250 |
| Aggregate number of shareholders and the outstanding shares lying in the Unclaimed Suspense Account at the end of the year | 186 | 289,620 |

* In respect of the shares transferred to the Investor Education and Protection Fund Authority, shareholders are entitled to claim these shares from the Investor Education and Protection Fund Authority by making an application in form IEPF-5 available on website *http://www.iepf.gov.in/IEPFA/corporates.html* along with the requisite documents.

Shareholders are entitled to claim the shares lying in the Unclaimed Suspense Account after complying with laid down procedures. On receipt of a claim, the Company will after verification, either credit the shares to the shareholder's demat account or deliver the physical certificate after re-materialising the same, as opted by the shareholder.

All corporate benefits in terms of securities accruing on these shares like bonus shares, sub-division, etc. will also be credited to the Unclaimed

Suspense Account and the voting rights on these shares will remain frozen until the claim is made by the rightful owner.

## 5. AGM & Dividend details

### (i) Forthcoming Annual General Meeting

Friday, the 3rd August 2018 at 3.00 P.M. IST at TTK Auditorium, Music Academy, 168 (Old No. 306) TTK Road, Royapettah, Chennai 600 014. Proxies, to be valid, must be lodged at the registered office of the Company not later than 48 hours before commencement of the meeting.

### (ii) Dividend

The Board at its meeting held on 14th February 2018 had approved payment of an interim dividend on the equity shares of the Company at 100% i.e., ₹1.00 per equity share which was paid on 5th March 2018. The Board at its meeting held on 4th May 2018 has further recommended a payment of final dividend at 125% i.e., ₹1.25/- per equity share for the year ended 31st March 2018. The final dividend will be paid within 7 days upon declaration by the shareholders at the ensuing Annual General Meeting i.e. by Friday, 10th August 2018.

### (iii) Unclaimed Dividend

Dividends remaining unclaimed/unpaid for a period of 7 years shall be transferred to the Investor Education Protection Fund (IEPF). The details of dividend paid by the Company and the respective due dates of transfer of the unclaimed/unencashed dividend to the IEPF of the Central Government are as below:

| Financial year to which dividend relates | Date of Declaration | Due date of transfer to IEPF |
|---|---|---|
| 2010-11 (Final) | 05-08-2011 | 11-09-2018 |
| 2011-12 (Interim) | 04-02-2012 | 12-03-2019 |
| 2011-12 (Final) | 07-08-2012 | 13-09-2019 |
| 2012-13 (Interim) | 05-02-2013 | 14-03-2020 |
| 2012-13 (Final) | 30-07-2013 | 05-09-2020 |
| 2013-14 (Interim) | 31-01-2014 | 09-03-2021 |
| 2013-14 (Final) | 01-08-2014 | 07-09-2021 |
| 2014-15 (Interim) | 29-01-2015 | 07-03-2022 |
| 2014-15 (Final) | 03-08-2015 | 09-09-2022 |
| 2015-16 (Interim - I) | 05-02-2016 | 13-03-2023 |
| 2015-16 (Interim - II) | 11-03-2016 | 17-04-2023 |
| 2016-17 (Interim) | 04-02-2017 | 13-03-2024 |
| 2016-17 (Final) | 31-07-2017 | 06-09-2024 |
| 2017-18 (Interim) | 14-02-2018 | 23-03-2025 |

The Company has transferred unclaimed/ unencashed dividends up to interim dividend for FY 2011-12 to the IEPF during the year ended 31th March 2018. The Company has uploaded the details relating to unclaimed dividends on its website for the benefit of its shareholders.

### (iv) Shares transferred to IEPF

Pursuant to the notification of Section 124(6) of the Companies Act, 2013 and Investor Education and Authority (Accounting, Audit, Transfer and Refund) Rules, 2016, the Company is required to transfer shares in respect of which dividend has not been paid or claimed for seven consecutive years or more. During the year, the Company transferred 515,895 equity shares pertaining to 427 holders to the Investor Education and Protection Fund Authority pursuant to Section 124(6) of the Companies Act, 2013 and the Companies Investor Education and Protection Fund Authority (Accounting, Audit, Transfer and Refund) Rules, 2016 (amended from time to time). The Company had issued the requisite notice to the shareholders concerned intimating them of the impending transfer of shares and had simultaneously published a notice in leading dailies. Further, the Company has uploaded the details of the same on its website for the benefit of its shareholders.

Shareholders are entitled to claim the shares from the Investor Education and Protection Fund Authority by making an application online in Form IEPF-5 available on the website *http://www.iepf.gov.in/IEPFA/refund.html* along with the requisite documents. Shareholders are requested to contact the Company's RTA - Karvy Computershare Private Limited or the Company in this regard. The contact details are available in the Corporate Information section of this Report.

On behalf of the Board

Chennai
May 4, 2018

**M M Murugappan**
*Chairman*

## Declaration on Code of Conduct

To

The Members of Carborundum Universal Limited

This is to confirm that that the Board has laid down a Code of Conduct for all Board members and Senior Management of Company.

It is further confirmed that all Directors and Senior Management personnel of the Company have affirmed compliance with the Code of Conduct of the Company as at 31st March 2018, as envisaged in regulation 34(3) read with Schedule V of the Listing Regulations.

On behalf of the Board

Chennai
May 4, 2018

**K Srinivasan**
*Managing Director*

The Code of conduct is uploaded and available at the following link *http://www.cumi-murugappa.com/policies.html.*

## Certificate on Corporate Governance

The Members
**CARBORUNDUM UNIVERSAL LIMITED**
Parry House,
43, Moore Street,
Chennai – 600 001

We have examined all relevant records of **Carborundum Universal Limited,** (CIN:L29224TN1954PLC000318) having its Registered Office at Parry House, 43, Moore Street, Chennai - 600 001, for the purpose of certifying compliance of the conditions of Corporate Governance under Regulation 17 to 27 and clauses (b) to (i) of regulation 46(2) and para C, D and E of Schedule V to the SEBI (Listing Obligations and Disclosure Requirements) Regulations, 2015 read with Regulation 34(3) of the SEBI (Listing Obligations and Disclosure Requirements) Regulations, 2015 for the financial year ended March 31, 2018. We have obtained all the information and explanations, which to the best of our knowledge and belief were necessary for the purpose of certification.

The compliance of the conditions of Corporate Governance is the responsibility of the management. Our examination was limited to the procedures and implementation thereof, adopted by the Company for ensuring the compliance of the conditions of Corporate Governance.

This Certificate is neither an assurance as to the future viability of the Company nor of the efficiency or effectiveness with which the management has conducted the affairs of the Company. It is neither an audit nor an expression of opinion on the financial statements of the Company.

In our opinion and to the best of our information and according to the explanations given to us and the representations made by the Management, we certify that the Company has complied regarding the conditions of Corporate Governance as stipulated under the SEBI (Listing Obligations and Disclosure Requirements) Regulations, 2015 for the financial year ended 31st March, 2018.

**For R Sridharan & Associates**
*Company Secretaries*
**CS R Sridharan**
FCS No. 4775
CP No. 3239
UIN: S2003TN063400

May 4, 2018
Chennai

# Independent Auditors' Report

**To**

## The Members of Carborundum Universal Limited Report on the Consolidated Indian Accounting Standards (Ind AS) Financial Statements

1. We have audited the accompanying consolidated Ind AS financial statements of Carborundum Universal Limited (the 'Parent') and its subsidiaries (the Parent and its subsidiaries together referred to as "the Group"), its jointly controlled entities and an associate company along with its wholly owned subsidiaries ('Associate'); (refer Note 32, 6A and 6B to the attached consolidated financial statements), comprising of the Consolidated Balance Sheet as at March 31, 2018, the Consolidated Statement of Profit and Loss (including Other Comprehensive Income), the Consolidated Cash Flow Statement and the Consolidated Statement of Changes in Equity for the year then ended and a summary of the significant accounting policies and other explanatory information prepared based on the relevant records (hereinafter referred to as "the Consolidated Ind AS Financial Statements").

## Management's Responsibility for the Consolidated Ind AS Financial Statements

2. The Parent's Board of Directors is responsible for the preparation of these consolidated Ind AS financial statements in terms of the requirements of the Companies Act, 2013 (hereinafter referred to as "the Act") that give a true and fair view of the consolidated financial position, consolidated financial performance, consolidated cash flows and changes in equity of the Group including its jointly controlled entities and an associate company along with its wholly owned subsidiaries in accordance with accounting principles generally accepted in India including the Indian Accounting Standards specified in the Companies (Indian Accounting Standards) Rules, 2015 (as amended) under Section 133 of the Act. The Parent's Board of Directors is also responsible for ensuring accuracy of records including financial information considered necessary for the preparation of consolidated Ind AS financial statements. The respective Board of Directors of the companies included in the Group and of jointly controlled entities and an associate along with its wholly owned subsidiaries are responsible for maintenance of adequate accounting records in accordance with the provisions of the Act, for safeguarding the assets of the Group and jointly controlled entities and an associate along with its wholly owned subsidiaries respectively and for preventing and detecting frauds and other irregularities; the selection and application of appropriate accounting policies; making judgements and estimates that are reasonable and prudent; and the design, implementation and maintenance of adequate internal financial controls, that were operating effectively for ensuring the accuracy and completeness of the accounting records, relevant to the preparation and presentation of the financial statements that give a true and fair view and are free from material misstatement, whether due to fraud or error, which has been used for the purpose of preparation of the consolidated Ind AS financial statements by the Directors of the Parent, as aforesaid.

## Auditors' Responsibility

3. Our responsibility is to express an opinion on these consolidated Ind AS financial statements based on our audit. While conducting the audit, we have taken into account the provisions of the Act and the Rules made thereunder including the accounting standards and matters which are required to be included in the audit report.

4. We conducted our audit of the consolidated Ind AS financial statements in accordance with the Standards on Auditing specified under Section 143(10) of the Act and other applicable authoritative pronouncements issued by the Institute of Chartered Accountants of India. Those Standards and pronouncements require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the consolidated Ind AS financial statements are free from material misstatement.

5. An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated Ind AS financial statements. The procedures selected depend on the auditors' judgement, including the assessment of the risks of material misstatement of the consolidated Ind AS financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal financial control relevant to the Parent's preparation of the consolidated Ind AS financial statements that give a true and fair view, in order to design audit procedures that are appropriate in the circumstances. An audit also includes evaluating the appropriateness of the accounting policies used and the reasonableness of the accounting estimates made by the Parent's Board of Directors, as well as evaluating the overall presentation of the consolidated Ind AS financial statements.

6. We believe that the audit evidence obtained by us and the audit evidence obtained by the other auditors in terms of their reports referred to in sub-paragraph 8 of the Other Matters paragraph below, other than the unaudited financial statements as certified by the management and referred to in sub-paragraph 9 of the Other Matters paragraph below, is sufficient and appropriate to provide a basis for our audit opinion on the consolidated Ind AS financial statements.

## Opinion

7. In our opinion and to the best of our information and according to the explanations given to us, the aforesaid consolidated Ind AS financial statements give the information required by the Act in the manner so required and give a true and fair view in conformity with the accounting principles generally accepted in India of the consolidated state of affairs of the Group, its jointly controlled entities and an associate along with its wholly owned subsidiaries as at March 31, 2018 and their consolidated total comprehensive income (comprising of consolidated profit and consolidated other comprehensive income), their consolidated cash flows and consolidated changes in equity for the year ended on that date.

## Other Matters

8. We did not audit the financial statements/financial information of eleven subsidiaries whose financial statements/financial information reflect total assets of ₹12,218 million and net assets of ₹9,374 million as at March 31, 2018, total revenue of ₹10,402 million, total comprehensive income (comprising of profit and other comprehensive income) of ₹1,398 million and net cash out flows amounting to ₹124 million for the year ended on that date, as considered in the consolidated Ind AS financial statements. The consolidated Ind AS financial statements/financial information also include the Group's share of total comprehensive income (comprising of profit and other comprehensive income) of ₹95 million for the year ended March 31, 2018 as considered in the consolidated Ind AS financial statements, in respect of two jointly controlled entities whose financial statements have not been audited by us. These financial statements/financial information have been audited by other auditors whose reports have been furnished to us by the Management, and our opinion on the consolidated Ind AS financial statements insofar as it relates to the amounts and disclosures included in respect of these subsidiaries and jointly controlled entities and our report in terms of sub-section (3) of Section 143 of the Act insofar as it relates to the aforesaid subsidiaries and jointly controlled entities is based solely on the reports of the other auditors.

9. We did not audit the financial statements/financial information of one subsidiary, whose financial statements/financial information reflect total assets of ₹Nil and net assets of ₹Nil as at March 31, 2018, total revenue of ₹0.0 million, total comprehensive income (comprising of loss and other comprehensive income) of ₹0.1 million and net cash outflows amounting to ₹0.6 million for the year ended on that date, as considered in the consolidated Ind AS financial statements. These financial statements/financial information are unaudited and have been furnished to us by the Management, and our opinion on the consolidated Ind AS financial statements insofar as it relates to the amounts and disclosures included in respect of this subsidiary, is based solely on such unaudited financial statements/financial information. In our opinion and according to the information and explanations given to us by the Management, these financial statements/financial information, are not material to the Group.

10. The financial statements/financial information of eight subsidiaries located outside India, included in the consolidated financial statements, which constitute total assets of ₹10,282 million and net assets of ₹7,768 million as at March 31, 2018, total revenue of ₹8,936 million, total comprehensive income (comprising of profit and other comprehensive income) of ₹1,091 million and net cash flows amounting to ₹66 million for the year then ended have been prepared in accordance with accounting principles generally accepted in their respective countries and have been audited by other auditors under generally accepted auditing standards applicable in their respective countries. The Parent's management has converted the financial statements/financial information of such subsidiaries located outside India from the accounting principles generally accepted in their respective countries to the accounting principles generally accepted in India. We have audited these conversion adjustments made by the Parent's management. Our opinion in so far as it relates to the balances and affairs of such subsidiaries located outside India is based on the report of other auditors and the conversion adjustments prepared by the management of the Parent and audited by us.

11. The consolidated Ind AS financial statements for the year ended March 31, 2017, were audited by another firm of chartered accountants under the Companies Act, 2013 who, vide their report dated May 9, 2017, expressed an unmodified opinion on those consolidated financial statements.

Our opinion on the consolidated Ind AS financial statements and our report on Other Legal and Regulatory Requirements below, is not modified in respect of the above matters with respect to our reliance on the work done and the reports of the other auditors and the financial statements certified by the Parent's Management.

## Report on Other Legal and Regulatory Requirements

12. As required by Section 143 (3) of the Act, we report, to the extent applicable, that:

    (a) We have sought and obtained all the information and explanations which to the best of our knowledge and belief were necessary for the purposes of our audit of the aforesaid consolidated Ind AS financial statements.

    (b) In our opinion, proper books of account as required by law maintained by the Parent, its subsidiaries included in the Group, jointly controlled entities and an associate company incorporated in India including relevant records relating to preparation of the aforesaid consolidated Ind AS financial statements have been kept so far as it appears from our examination of those books and records of the Parent and the reports of the other auditors.

    (c) The Consolidated Balance Sheet, the Consolidated Statement of Profit and Loss (including other comprehensive income), Consolidated Cash Flow Statement and the Consolidated Statement of Changes in Equity dealt with by this Report are in agreement with the relevant books of account maintained by the Parent, its subsidiaries included in the Group, jointly controlled entities and associate including relevant records relating to the preparation of the consolidated Ind AS financial statements.

    (d) In our opinion, the aforesaid consolidated Ind AS financial statements comply with the Indian Accounting Standards specified under Section 133 of the Act.

    (e) On the basis of the written representations received from the directors of the Parent as on March 31, 2018 taken on record by the Board of Directors of the Parent and the reports of the statutory auditors of its subsidiary companies, jointly controlled entities and associate company incorporated in India, none of the directors of the Parent, its subsidiaries included in the Group, its jointly controlled entities and an associate incorporated in India are disqualified as on March 31, 2018 from being appointed as a director in terms of Section 164 (2) of the Act.

(f) With respect to the adequacy of the internal financial controls with reference to the financial statements of the Parent, its subsidiary companies, jointly controlled entities and associate incorporated in India and the operating effectiveness of such controls, refer to our separate Report in Annexure A.

(g) With respect to the other matters to be included in the Auditors' Report in accordance with Rule 11 of the Companies (Audit and Auditors) Rules, 2014, in our opinion and to the best of our information and according to the explanations given to us:

i. The consolidated Ind AS financial statements disclose the impact of pending litigations as at March 31, 2018 on the consolidated financial position of the Group, its jointly controlled entities and the associate company along with its wholly owned subsidiaries - Refer Note 33 to the consolidated Ind AS financial statements.

ii. The Parent, its subsidiary companies, jointly controlled entities and the associate company did not have any material foreseeable losses on long-term contracts including derivative contracts as at March 31, 2018.

iii. There has been no delay in transferring amounts, required to be transferred, to the Investor Education and Protection Fund by the Parent and its subsidiary companies, jointly controlled entities and an associate company incorporated in India during the year ended March 31, 2018.

iv. The reporting on disclosures relating to specified bank notes is not applicable to the Group for the year ended March 31, 2018.

**For Price Waterhouse Chartered Accountants LLP**
Firm Registration Number: 012754N/N500016
*Chartered Accountants*

**Subramanian Vivek**
*Partner*
Membership No. 100332

Place: Chennai
Date: May 04, 2018

## Annexure A to Independent Auditors' Report

**Referred to in paragraph 12(f) of the Independent Auditors' Report of even date to the members of Carborundum Universal Limited on the consolidated financial statements for the year ended March 31, 2018**

### Report on the Internal Financial Controls under Clause (i) of Sub-section 3 of Section 143 of the Act

1. In conjunction with our audit of the consolidated financial statements of the Company as of and for the year ended March 31, 2018, we have audited the internal financial controls over financial reporting of Carborundum Universal Limited (hereinafter referred to as "the Parent") and its subsidiary companies, its jointly controlled entities and an associate, which are companies incorporated in India, as of that date.

### Management's Responsibility for Internal Financial Controls

2. The respective Board of Directors of the Parent, its subsidiary companies, its jointly controlled entities and an associate, to whom reporting under clause (i) of sub section 3 of Section 143 of the Act in respect of the adequacy of the internal financial controls over financial reporting is applicable, which are companies incorporated in India, are responsible for establishing and maintaining internal financial controls based on internal control over financial reporting criteria established by the Company considering the essential components of internal control stated in the Guidance Note on Audit of Internal Financial Controls Over Financial Reporting issued by the Institute of Chartered Accountants of India (ICAI).These responsibilities include the design, implementation and maintenance of adequate internal financial controls that were operating effectively for ensuring the orderly and efficient conduct of its business, including adherence to the respective Company's policies, the safeguarding of its assets, the prevention and detection of frauds and errors, the accuracy and completeness of the accounting records and the timely preparation of reliable financial information, as required under the Act.

### Auditor's Responsibility

3. Our responsibility is to express an opinion on the Company's internal financial controls over financial reporting based on our audit. We conducted our audit in accordance with the Guidance Note on Audit of Internal Financial Controls Over Financial Reporting (the "Guidance Note") issued by the ICAI and the Standards on Auditing deemed to be prescribed under section 143(10) of the Companies Act, 2013, to the extent applicable to an audit of internal financial controls, both applicable to an audit of internal financial controls and issued by the ICAI. Those Standards and the Guidance Note require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether adequate internal financial controls over financial reporting was established and maintained and if such controls operated effectively in all material respects.

4. Our audit involves performing procedures to obtain audit evidence about the adequacy of the internal financial controls system over financial reporting and their operating effectiveness. Our audit of internal financial controls over financial reporting included obtaining an understanding of internal financial controls over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. The procedures selected

depend on the auditor's judgement, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error.

5. We believe that the audit evidence we have obtained and the audit evidence obtained by the other auditors in terms of their reports referred to in the Other Matters paragraph below, is sufficient and appropriate to provide a basis for our audit opinion on the Company's internal financial controls system over financial reporting.

## Meaning of Internal Financial Controls Over Financial Reporting

6. A company's internal financial control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal financial control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorisations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorised acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

## Inherent Limitations of Internal Financial Controls Over Financial Reporting

7. Because of the inherent limitations of internal financial controls over financial reporting, including the possibility of collusion or improper management override of controls, material misstatements due to error or fraud may occur and not be detected. Also, projections of any evaluation of the internal financial controls over financial reporting to future periods are subject to the risk that the internal financial control over financial reporting may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

## Opinion

8. In our opinion, the Parent, its subsidiary companies, its jointly controlled entities and an associate, which are companies incorporated in India, have, in all material respects, an adequate internal financial controls system over financial reporting and such internal financial controls over financial reporting were operating effectively as at March 31, 2018, based on the internal control over financial reporting criteria established by the Company considering the essential components of internal control stated in the Guidance Note on Audit of Internal Financial Controls Over Financial Reporting issued by the Institute of Chartered Accountants of India.

## Other Matters

9. Our aforesaid reports under Section 143(3)(i) of the Act on the adequacy and operating effectiveness of the internal financial controls over financial reporting insofar as it relates to three subsidiary companies and two jointly controlled entities, which are companies incorporated in India, is based on the corresponding reports of the auditors of such companies incorporated in India. Our opinion is not qualified in respect of this matter.

**For Price Waterhouse Chartered Accountants LLP**
Firm Registration Number: 012754N/N500016
*Chartered Accountants*

**Subramanian Vivek**
*Partner*
Membership No. 100332

Place: Chennai
Date: May 04, 2018

## Consolidated Balance Sheet

(in Indian Rupees million, unless otherwise stated)

| Particulars | Notes | As at 31.03.2018 | As at 31.03.2017 |
|---|---|---|---|
| **ASSETS** | | | |
| **Non-current assets** | | | |
| (a) Property, plant and equipment | 4A | 6144.01 | 5817.73 |
| (b) Capital work-in-progress | 4B | 302.51 | 725.64 |
| (c) Goodwill | 5A | 1151.41 | 1147.95 |
| (d) Other Intangible assets | 5B(i) | 61.03 | 82.38 |
| (e) Intangible assets under development | 5B(ii) | 0.29 | 0.34 |
| (f) Investment accounted for using the equity method | | | |
| (i) Investments in associate | 6A | 484.89 | 447.77 |
| (ii) Investments in joint ventures | 6B | 587.27 | 614.31 |
| (g) Financial assets | | | |
| (i) Investments | 6C(i) | 160.29 | 132.85 |
| (ii) Other financial assets | 7A | 120.76 | 110.80 |
| (h) Deferred tax assets (net) | 8A | 109.64 | 89.98 |
| (i) Other non-current assets | 9A | 310.91 | 342.87 |
| **Total non-current assets** | | **9433.01** | **9512.62** |
| **Current assets** | | | |
| (a) Inventories | 10 | 4380.24 | 3866.97 |
| (b) Financial assets | | | |
| (i) Other Investments | 6C(ii) | 570.49 | 49.64 |
| (ii) Trade receivables | 11 | 4750.60 | 3805.83 |
| (iii) Cash and Cash equivalents | 12A | 1276.34 | 1248.39 |
| (iv) Bank balances other than (iii) above | 12B | 12.76 | 12.21 |
| (v) Other Financial assets | 7B | 54.66 | 54.48 |
| (c) Other Current assets | 9B | 507.11 | 672.08 |
| **Total current assets** | | **11552.20** | **9709.60** |
| **Total Assets** | | **20985.21** | **19222.22** |
| **EQUITY AND LIABILITIES** | | | |
| **Equity** | | | |
| (a) Equity share capital | 13 | 188.96 | 188.66 |
| (b) Other equity | 14 | 15454.54 | 13639.20 |
| **Equity attributable to owners of the Company** | | 15643.50 | 13827.86 |
| Non-controlling interests | 15 | 614.74 | 656.63 |
| **Total Equity** | | **16258.24** | **14484.49** |
| **Non-current liabilities** | | | |
| (a) Financial liabilities | | | |
| Borrowings | 16 | 66.32 | 66.81 |
| (b) Provisions | 17A | 91.69 | 75.52 |
| (c) Deferred tax liabilities (net) | 8B | 383.15 | 463.95 |
| **Total non-current liabilities** | | **541.16** | **606.28** |
| **Current liabilities** | | | |
| (a) Financial liabilities | | | |
| (i) Borrowings | 18 | 1181.59 | 1424.47 |
| (ii) Trade payables | 19 | 1975.67 | 1650.23 |
| (iii) Other financial liabilities | 20 | 667.61 | 670.81 |
| (b) Provisions | 17B | 170.59 | 161.34 |
| (c) Other current liabilities | 21 | 190.35 | 224.60 |
| **Total Current liabilities** | | **4185.81** | **4131.45** |
| **Total Liabilities** | | **4726.97** | **4737.73** |
| **Total Equity and Liabilities** | | **20985.21** | **19222.22** |
| See accompanying notes forming part of the consolidated financial statements | | | |

In terms of our report attached

For **Price Waterhouse Chartered Accountants LLP**
Firm Registration Number: 012754N/N500016
*Chartered Accountants*

**Subramanian Vivek**
*Partner*
Membership Number: 100332
Chennai
May 04, 2018

On behalf of the Board

**M M Murugappan**
*Chairman*

**K Srinivasan**
*Managing Director*

**P Padmanabhan**
*Senior Associate Vice President - Accounts and Taxation*

**Rekha Surendhiran**
*Company Secretary*

## Consolidated Statement of Profit and Loss

(in Indian Rupees million, unless otherwise stated)

| S.No. | Particulars | Notes | For the year 2017-18 | For the year 2016-17 |
|---|---|---|---|---|
| I | Revenue from Operations | 22 | 23951.68 | 22323.45 |
| II | Other Income | 23 | 229.17 | 228.00 |
| III | **Total Income** | | **24180.85** | **22551.45** |
| IV | **Expenses** | | | |
| | Cost of material consumed | | 6465.27 | 6233.30 |
| | Purchase of stock-in-trade | | 1340.35 | 1117.24 |
| | Changes in inventories of finished goods, stock-in-trade and work-in-progress | 24 | 243.67 | (2.39) |
| | Excise duty on sale of goods | | 274.07 | 1198.59 |
| | Employee benefit expense | 25 | 3109.14 | 2735.06 |
| | Finance costs | 26 | 86.12 | 181.20 |
| | Depreciation and amortisation expense | 27 | 1059.95 | 964.81 |
| | Other expenses | 28 | 8532.73 | 7695.88 |
| | **Total expenses (IV)** | | **21111.30** | **20123.69** |
| V | **Profit from operations before share of profit of equity accounted investees and income tax [III] - [IV]** | | **3069.55** | **2427.76** |
| VI | Share of profit of associate (net of tax) | 6A | 52.32 | 48.05 |
| VII | Share of profit of joint ventures (net of tax) | 6B | 94.28 | 142.83 |
| VIII | **Profit before tax [V] +[VI]+[VII]** | | **3216.15** | **2618.64** |
| IX | **Tax expense** | | | |
| | (1) Current tax | 29A | 1114.72 | 810.61 |
| | (2) Deferred tax | 8 | (94.45) | (29.77) |
| | **Total tax [IX]** | | **1020.27** | **780.84** |
| X | **Profit for the year [VIII]-[IX]** | | **2195.88** | **1837.80** |
| XI | **Other Comprehensive Income [OCI]** | | | |
| A | (i) Items that will not be reclassified to profit or loss | | | |
| | (a) Remeasurement of the defined benefit plans | | 3.59 | (28.39) |
| | (b) Equity instruments through other comprehensive income | | 26.63 | (54.16) |
| | (c) Share of OCI in associate and joint ventures, to the extent not to be reclassified to profit or loss | | 2.34 | (3.70) |
| | (ii) Income tax relating to items that will not be reclassified to profit or loss | 29B | - | - |
| | | | **32.56** | **(86.25)** |
| B | (i) Items that will be reclassified to profit or loss | | | |
| | (a) Exchange differences in translating the financial statements of foreign operations | | (19.92) | 476.91 |
| | (b) Effective portion of gain and loss on designated portion of hedging instruments in a cash flow hedge | | (3.94) | 3.81 |
| | (c) Share of OCI in associate and joint ventures, to the extent that may be reclassified to profit or loss | | 7.34 | (0.07) |
| | (ii) Income tax relating to items that will be reclassified to profit or loss | 29B | 1.33 | (1.26) |
| | | | **(15.19)** | **479.39** |
| | **Total Other Comprehensive Income [XI]** | | **17.37** | **393.14** |
| XII | **Total Comprehensive Income [X]+[XI]** | | **2213.25** | **2230.94** |
| | | | | |
| | **Profit for the year attributable to: [X]** | | **2195.88** | **1837.80** |
| | - Owners of the Company | | 2155.96 | 1748.67 |
| | - Non-Controlling Interest | | 39.92 | 89.13 |
| | **Other Comprehensive Income: [XI]** | | 17.37 | 393.14 |
| | - Owners of the Company | | 18.47 | 392.87 |
| | - Non-Controlling Interest | | (1.10) | 0.27 |
| | **Total Comprehensive Income: [XII]** | | 2213.25 | 2230.94 |
| | - Owners of the Company | | 2174.43 | 2141.54 |
| | - Non-Controlling Interest | | 38.82 | 89.40 |
| XIII | **Earnings per share (₹1 each) on Profit for the year (X)** | 30 | | |
| | - Basic | | 11.42 | 9.28 |
| | - Diluted | | 11.39 | 9.25 |

See accompanying notes forming part of the consolidated financial statements

In terms of our report attached

For **Price Waterhouse Chartered Accountants LLP**
Firm Registration Number: 012754N/N500016
*Chartered Accountants*

**Subramanian Vivek**
*Partner*
Membership Number: 100332
Chennai
May 04, 2018

On behalf of the Board

**M M Murugappan**
*Chairman*

**K Srinivasan**
*Managing Director*

**P Padmanabhan**
*Senior Associate Vice President - Accounts and Taxation*

**Rekha Surendhiran**
*Company Secretary*

# Consolidated Statement of changes in other equity
(in Indian Rupees million, unless otherwise stated)

**A. Equity share capital - Refer Note: 13**

| | |
|---|---|
| **Balance as at March 31, 2016** | **188.38** |
| Changes in equity share capital during the year | |
| Shares issued against ESOP Scheme/Plan | 0.28 |
| **Balance as at March 31, 2017** | **188.66** |
| Changes in equity share capital during the year | |
| Shares issued against ESOP Scheme/Plan | 0.30 |
| **Balance as at March 31, 2018** | **188.96** |

**B. Statement of changes in other equity - Refer Note: 14 & 15**

| Particulars | Reserves and Surplus - Refer Note: 14A | | | | | | | Items of Other comprehensive income - Refer Note 14B | | | | Share application money pending allotment - Refer Note: 14C | Attributable to owners of the parent - Refer Note:14 | Non-controlling interest [NCI] - Refer Note: 15 | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Profit on Forfeiture of Shares / Warrants | Capital redemption reserve | Capital reserve on consolidation | Securities premium | General Reserve | Share options outstanding account | Retained Earnings | Reserve for equity instruments | Effective portion of Cash flow hedge | Foreign currency translation reserve | Revaluation surplus | | | | |
| | (a) | (b) | (c) | (d) | (e) | (f) | (g) | (h) | (i) | (j) | (k) | | | | |
| Balance at the beginning of the year - March 31, 2016 | 6.03 | 27.68 | 720.22 | 166.61 | 5730.94 | 11.77 | 5142.77 | 111.95 | 0.30 | (207.79) | 23.74 | | 11734.22 | 621.61 | 12355.83 |
| Profit for the year | | | | | | | 1748.67 | | | | | | 1748.67 | 89.13 | 1837.80 |
| Other Comprehensive income for the year | | | | | | | (31.33) | (54.16) | 1.52 | 476.84 | | | 392.87 | 0.27 | 393.14 |
| **Total Comprehensive income for the year** | **-** | **-** | **-** | **-** | **-** | **-** | **1717.34** | **(54.16)** | **1.52** | **476.84** | **-** | **-** | **2141.54** | **89.40** | **2230.94** |
| Additions during the year | | | (15.57) | 27.54 | | 4.31 | | | | | | | 16.28 | | 16.28 |
| Interim dividend paid during the year | | | | | | | (188.63) | | | | | | (188.63) | | (188.63) |
| Dividend tax paid during the year | | | | | | | (15.75) | | | | | | (15.75) | | (15.75) |
| Dividend tax paid by subsidiaries and Joint ventures | | | | | | | (48.46) | | | | | | (48.46) | | (48.46) |
| Transfer to General Reserve | | | | | 500.00 | | (500.00) | | | | | | - | | - |
| Dividend paid to NCI and its relevant tax | | | | | | | - | | | | | | - | (68.38) | (68.38) |
| Translation impact on foreign subsidiaries NCI portion | | | | | | | - | | | | | | - | 14.00 | 14.00 |
| **Balance at the end of the year - March 31, 2017** | **6.03** | **27.68** | **704.65** | **194.15** | **6230.94** | **16.08** | **6107.27** | **57.79** | **1.82** | **269.05** | **23.74** | | **13639.20** | **656.63** | **14295.83** |
| Profit for the year | | | | | | | 2155.96 | | | | | | 2155.96 | 39.92 | 2195.88 |
| Other Comprehensive income for the year | | | | | | | 5.99 | 26.63 | (1.57) | (12.58) | | | 18.47 | (1.10) | 17.37 |
| **Total Comprehensive income for the year** | **-** | **-** | **-** | **-** | **-** | **-** | **2161.95** | **26.63** | **(1.57)** | **(12.58)** | **-** | **-** | **2174.43** | **38.82** | **2213.25** |
| Additions during the year | | | 2.12 | 32.04 | | 14.76 | | | | | | | 48.92 | | 48.92 |
| Share application money received pending for allotment | | | | | | | | | | | | 0.23 | 0.23 | | 0.23 |
| Final dividend paid during the year | | | | | | | (141.51) | | | | | | (141.51) | | (141.51) |
| Dividend tax on Final dividend paid during the year | | | | | | | (14.92) | | | | | | (14.92) | | (14.92) |
| Interim dividend paid during the year | | | | | | | (188.93) | | | | | | (188.93) | | (188.93) |
| Dividend tax paid during the year | | | | | | | (20.31) | | | | | | (20.31) | | (20.31) |
| Dividend tax paid by subsidiaries and Joint ventures | | | | | | | (42.57) | | | | | | (42.57) | | (42.57) |
| Transfer to General Reserve | | | | | 500.00 | | (500.00) | | | | | | - | | - |
| Dividend paid to NCI and its relevant tax | | | | | | | - | | | | | | - | (84.36) | (84.36) |
| Translation impact on foreign subsidiaries NCI portion | | | | | | | - | | | | | | - | 3.65 | 3.65 |
| **Balance at the end of the year - March 31, 2018** | **6.03** | **27.68** | **706.77** | **226.19** | **6730.94** | **30.84** | **7360.98** | **84.42** | **0.25** | **256.47** | **23.74** | **0.23** | **15454.54** | **614.74** | **16069.28** |

See accompanying notes forming part of the consolidated financial statements

In terms of our report attached
For **Price Waterhouse Chartered Accountants LLP**
Firm Registration Number: 012754N/N500016
*Chartered Accountants*
**Subramanian Vivek**, *Partner*
Membership Number: 100332
Chennai, May 04, 2018

On behalf of the Board

**M M Murugappan**
*Chairman*

**K Srinivasan**
*Managing Director*

**P Padmanabhan**
*Senior Associate Vice President - Accounts and Taxation*

**Rekha Surendhiran**
*Company Secretary*

## Consolidated Cash Flow Statement

(in Indian Rupees million, unless otherwise stated)

| Particulars | 2017-18 | | 2016-17 | |
|---|---|---|---|---|
| **Profit before tax** | | **3216.15** | | **2618.64** |
| **Adjustment for:** | | | | |
| Share of profit of associate | (52.32) | | (48.05) | |
| Share of profit of Joint ventures | (94.28) | | (142.83) | |
| Fair value of Investments | (0.78) | | (0.75) | |
| Depreciation and amortisation | 1059.95 | | 964.81 | |
| Finance costs | 86.12 | | 181.20 | |
| Impairment on Non-current assets | - | | 37.34 | |
| Interest income | (35.54) | | (32.97) | |
| Profit on sale of Investment | - | | (0.38) | |
| Dividend income | (14.60) | | (22.72) | |
| Expenses recognised in respect of equity-settled share-based payments | 14.76 | | 4.31 | |
| Impairment loss on financial assets (net) | 6.90 | | 1.36 | |
| Allowance for doubtful receivable and advances | 33.22 | | 78.38 | |
| Reversal of allowance for doubtful receivables and advances | (30.94) | | (90.41) | |
| Provision for expenses no longer required written back | (17.61) | | (40.63) | |
| Loss/(profit) on sale of assets (net) | 0.93 | | (9.81) | |
| Loss/(profit) on exchange fluctuation (net) | (26.60) | **929.21** | 15.11 | **893.96** |
| **Operating profit before working capital changes** | | **4145.36** | | **3512.60** |
| **Movement in working capital** | | | | |
| (Increase)/decrease in Trade receivables | (1058.04) | | 23.40 | |
| (Increase)/decrease in Inventories | (479.63) | | (23.32) | |
| (Increase)/decrease in Other financial asset | (11.00) | | 267.17 | |
| (Increase)/decrease in Other assets | 155.07 | | (180.66) | |
| Increase/(decrease) in Trade payables | 452.71 | | 195.27 | |
| Increase/(decrease) in Provision & other current liabilities | (11.22) | | 61.28 | |
| Increase/(decrease) in Other financial liabilities | 45.04 | **(907.07)** | (115.17) | **227.97** |
| **Cash generated from Operations** | | **3238.29** | | **3740.57** |
| Income tax paid | | (1108.51) | | (787.94) |
| **Net cash generated by Operating activities [A]** | | **2129.78** | | **2952.63** |
| **Cash flow from investing activities** | | | | |
| Payments to acquire Fixed asset | (920.76) | | (1174.87) | |
| Payments for Intangible asset | (18.22) | | (10.58) | |
| Proceeds from sale of Fixed assets | 19.09 | | 124.34 | |
| Dividend income from Associate | 19.93 | | 19.93 | |
| Dividend income from Joint ventures | 101.54 | | 172.39 | |
| Proceeds / (Purchase) of Investments | (0.04) | | 0.35 | |
| Interest income received | 35.53 | | 32.96 | |
| Dividend income received | 14.60 | | 22.72 | |
| **Net cash (used in)/generated by Investing activities [B]** | | **(748.33)** | | **(812.76)** |

## Consolidated Cash Flow Statement

(in Indian Rupees million, unless otherwise stated)

| Particulars | 2017-18 | | 2016-17 | |
|---|---|---|---|---|
| **Cash flow from financing activities** | | | | |
| Proceeds from issue of equity shares | 32.34 | | 27.82 | |
| Share application money pending allotment | 0.23 | | - | |
| Repayment/proceeds from long term borrowings | (33.36) | | (805.58) | |
| Repayment/proceeds from borrowings | (273.56) | | (825.86) | |
| Finance costs paid | (86.12) | | (181.20) | |
| Dividend paid to shareholder | (330.44) | | (188.63) | |
| Tax on Dividend | (35.23) | | (15.75) | |
| Dividend paid to Non-Controlling interest and its related tax | (84.36) | | (68.38) | |
| Tax on Dividend - Subsidiaries | (21.90) | | (13.37) | |
| **Net cash used in Financing activities [C]** | | **(832.40)** | | **(2070.95)** |
| **Net increase/(decrease) in cash and cash equivalents [A]+[B]+[C]** | | **549.05** | | **68.92** |
| **Add: Cash and Cash equivalents at the beginning of the year** | | **1298.03** | | **1135.80** |
| Effect of exchange rate changes on the balances of cash and cash equivalents held in foreign currencies | | (0.25) | | 93.31 |
| **Cash and Cash equivalents at the end of the year** | | **1846.83** | | **1298.03** |
| **Reconciliation of Cash and cash equivalents with the Balance Sheet:** | | | | |
| **Cash and cash equivalents at the beginning of the year** | | | | |
| Cash and cash equivalents - Refer Note: 12A | | 1248.39 | | 1118.38 |
| Current investment considered as Cash and Cash equivalents - Refer Note: 6C(ii) | | 49.64 | | 17.42 |
| | | **1298.03** | | **1135.80** |
| **Cash and cash equivalents at the end of the year** | | | | |
| Cash and cash equivalents - Refer Note: 12A | | 1276.34 | | 1248.39 |
| Current investment considered as Cash and Cash equivalents - Refer Note: 6C(ii) | | 570.49 | | 49.64 |
| | | **1846.83** | | **1298.03** |

See accompanying notes forming part of the consolidated financial statements

In terms of our report attached

For **Price Waterhouse Chartered Accountants LLP**
Firm Registration Number: 012754N/N500016
*Chartered Accountants*

**Subramanian Vivek**
*Partner*
Membership Number: 100332
Chennai
May 04, 2018

On behalf of the Board

**M M Murugappan**
*Chairman*

**K Srinivasan**
*Managing Director*

**P Padmanabhan**
*Senior Associate Vice President - Accounts and Taxation*

**Rekha Surendhiran**
*Company Secretary*

**Statement showing the applicable Key Accounting Standards (Ind AS) with related Policy & Notes references as per Consolidated Financial Statements.**

| Ind AS No. | Description | Accounting policy Reference | Note Reference |
|---|---|---|---|
| 2 | Inventories | 3.16 | 10 |
| 7 | Statement of Cash flow | 3.15 | 12 |
| 8 | Accounting Policies, Changes in Accounting Estimates and Errors | | 43 |
| 10 | Event after the reporting period | | 42,44 |
| 12 | Income tax | 3.10 | 29,8 |
| 16 | Property, plant and equipment | 3.11 | 4,27 |
| 17 | Leases | 3.23 | 4,37 |
| 18 | Revenue | 3.4 | 22 |
| 19 | Employee benefits | 3.8 | 25,34 |
| 24 | Related party disclosure | | 36 |
| 28 | Investments in associates and joint ventures | 3.1.2.2 | 6A,6B |
| 33 | Earning per share | 3.24 | 30 |
| 36 | Impairment of assets | 3.13 | 4,5 |
| 37 | Provisions, Contingent liabilities and assets | 3.17, 3.18 | 17,33 |
| 38 | Intangible assets | 3.12 | 5,27 |
| 102 | Share based payments | 3.9 | 25 |
| 103 | Business combinations | 3.12.3 | 5 |
| 105 | Non current held for sale and discontinued operations | 3.3 | |
| 107 | Financial instruments - Disclosures | 3.19, 3.26, 3.27 | 11,16,18, 23, 35 |
| 108 | Operating segments | 3.22 | 31 |
| 112 | Disclosure of interest in other entities | | 6A,6B,15 |
| 113 | Fair value measurements | | 35 |

## 1. General information

Carborundum Universal Limited (CUMI) was incorporated in India as a Public Limited Company in 1954 and the shares of the Company are listed in National Stock Exchange of India Ltd. and BSE Ltd. The address of its registered office and place of business are disclosed in the annual report. The consolidated financial statements comprise the Company (CUMI - Parent company) and its subsidiaries (referred to collectively as the 'Group') and the Group's interest in associates and joint ventures.

CUMI Group manufactures and sells mainly Abrasives, Ceramics (Industrial Ceramics, Refractories) and Electrominerals. (Refer Note: 31).

## 2. Application of Indian Accounting Standards (Ind AS):

The Consolidated financial statements comply in all material aspects with Indian Accounting Standards (Ind AS) notified under Section 133 of the Companies Act, 2013 (the Act) [Companies (Indian Accounting Standards) Rules, 2015] and other relevant provisions of the Act.

## 3. Significant accounting policies:

### 3.1.1 Basis of preparation and presentation:

The consolidated financial statements are presented in Indian Rupees (INR), which is also the Parent company functional currency.

The financial statements have been prepared on the historical cost basis except for certain financial instruments that are measured at fair values at the end of each reporting period, as explained in the accounting policies below:

Historical cost is generally based on the fair value of the consideration given in exchange for goods and services. Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The fair value measurement is based on the presumption that the transaction to sell the asset or transfer the liability takes place either:

- In the principal market for the asset or liability, or
- In the absence of a principal market, in the most advantageous market for the asset or liability.

The principal or the most advantageous market must be accessible by the Group.

The fair value of an asset or a liability is measured using the assumptions that market participants would use when pricing the asset or liability, assuming that market participants act in their best economic interest.

A fair value measurement of a non-financial asset takes into account a market participant's ability to generate economic benefits by using the asset in its highest and best use or by selling it to another market participant that would use the asset in its highest and best use.

The Group uses valuation techniques that are appropriate in the circumstances and for which sufficient data are available to measure fair value, maximising the use of relevant observable inputs and minimising the use of unobservable inputs.

All assets and liabilities for which fair value is measured or disclosed in the financial statements are categorised within the fair value hierarchy, described as follows, based on the lowest level input that is significant to the fair value measurement as a whole:

- Level 1 - Quoted (unadjusted) market prices in active markets for identical assets or liabilities.
- Level 2 - Valuation techniques for which the lowest level input that is significant to the fair value measurement is directly or indirectly observable.
- Level 3 - Valuation techniques for which the lowest level input that is significant to the fair value measurement is unobservable.

For assets and liabilities that are recognised in the financial statements on a recurring basis, the Group determines whether transfers have occurred between levels in the hierarchy by re-assessing categorisation (based on the lowest level input that is significant to the fair value measurement as a whole) at the end of each reporting period.

The financial statements of all entities used for the purpose of consolidation are drawn up to same reporting date as that of the Parent company, i.e., year ended on 31 March 2018. When the end of the reporting period of the Parent is different from that of a subsidiary, the subsidiary prepares, for consolidation purposes, additional financial information as of the same date as the financial statements of the Parent to enable the Parent to consolidate the financial information of the subsidiary, unless it is impracticable to do so.

### 3.1.2 Basis of consolidation

#### 3.1.2.1 Subsidiaries

Subsidiaries are entities controlled by the Group. The Group controls an entity when it is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. The financial statements of subsidiaries are included in the consolidated financial statements from the date on which control is acquired until the date on which control ceases to exist.

The acquisition method of accounting is used to account for business combinations by the Group. The Group combines the financial statements of the Parent and its subsidiaries line by line adding together like items of assets, liabilities, equity, income and expenses. Inter-Group transactions, balances and unrealised gains on transactions between Group companies are eliminated. Unrealised losses are also eliminated unless the transaction provides evidence of an impairment of the transferred asset. Accounting policies of subsidiaries have been changed where necessary to ensure consistency with the policies adopted by the Group.

Non-controlling interests in the results and equity of subsidiaries are shown separately in the Consolidated Statement of Profit and Loss, consolidated statement of changes in equity and Balance Sheet respectively.

Goodwill is initially measured at cost, being the excess of the aggregate of the consideration transferred and the amount recognised for non-controlling interests, and any previous interest held, over the net identifiable assets acquired and liabilities assumed.

If the fair value of the net assets acquired is in excess of the aggregate consideration transferred, the Group re-assesses whether it has correctly identified all of the assets acquired and all of the liabilities assumed and reviews the procedures used to measure the amounts to be recognised at the acquisition date.

If the reassessment still results in an excess of the fair value of net assets acquired over the aggregate consideration transferred, then the gain is recognised in OCI and accumulated in equity as capital reserve. However, if there is no clear evidence of bargain purchase, the entity recognises the gain directly in equity as capital reserve, without routing the same through OCI.

After initial recognition, goodwill is measured at cost less any accumulated impairment losses. For the purpose of impairment testing, goodwill acquired in a business combination is, from the acquisition date, allocated to each of the Group's cash-generating units that are expected to benefit from the combination, irrespective of whether other assets or liabilities of the acquiree are assigned to those units.

### 3.1.2.2 Associates and Joint ventures

An **associate** is an entity over which the Group has significant influence. Significant influence is the power to participate in the financial and operating policy decisions of the investee, but is not control or joint control over those policies.

A **joint venture** is a type of joint arrangement whereby the parties that have joint control of the arrangement have rights to the net assets of the joint venture. Joint control is the contractually agreed sharing of control of an arrangement, which exists only when decisions about the relevant activities require unanimous consent of the parties sharing control.

The considerations made in determining whether significant influence or joint control are similar to those necessary to determine control over the subsidiaries.

The Group's investments in its associate and joint venture are accounted for using the equity method. Under the equity method, the investment in an associate or a joint venture is initially recognised at cost. The carrying amount of the investment is adjusted to recognise changes in the Group's share of net assets of the associate or joint venture since the acquisition date. Goodwill relating to the associate or joint venture is included in the carrying amount of the investment and is not tested for impairment individually.

The Statement of Profit and Loss reflects the Group's share of the results of operations of the associate or joint venture. Any change in OCI of those investees is presented as part of the Group's OCI. In addition, when there has been a change recognised directly in the equity of the associate or joint venture, the Group recognises its share of any changes, when applicable, in the statement of changes in equity. Unrealised gains and losses resulting from transactions between the Group and the associate or joint venture are eliminated to the extent of the interest in the associate or joint venture.

The aggregate of the Group's share of profit or loss of an associate and a joint venture is shown on the face of the Statement of Profit and Loss.

### 3.1.2.3 Foreign currency translation

The consolidated financial statements are presented in Indian Rupee, which is the CUMI's functional and presentation currency and includes the financial position and results in respect of foreign operations, initially measured using the currency of the primary economic environment in which the entity operates (i.e their functional currency) and translated as follows:

- Assets and liabilities are translated at the closing rate at the date of that Balance Sheet;
- income and expenses are translated at average exchange rates;
- All resulting exchange differences are recognised in other comprehensive income;

Goodwill and fair value adjustments arising on the acquisition of a foreign operation are treated as assets and liabilities of the foreign operation and translated at the closing rate.

## 3.2 Use of estimates and judgements:

In preparing these financial statements, management has made judgements, estimates and assumptions that affect the application of accounting policies and the reported amounts of assets, liabilities, income and expenses. Actual results may differ from these estimates.

**3.2.1 Estimates** and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised prospectively.

**3.2.2 Judgements** are made in applying accounting policies that have the most significant effects on the amounts recognised in the financial statements.

**3.2.3 Assumptions** and estimation uncertainties that have a significant risk of resulting in a material adjustment are reviewed on an ongoing basis.

The areas involving critical estimates or judgements are:

| S.No | Particulars | Note |
|---|---|---|
| I | Estimation of useful life of tangible and intangible asset | 3.11 & 3.12 |
| II | Impairment test of Goodwill: Key assumption underlying recoverable amounts | 5A |
| III | Assessment of control over components and consolidation decisions and classification of Associate | 6A |
| IV | Assessment of control over components and consolidation decisions and classification of joint arrangements | 6B |
| V | Estimation of fair value of unlisted securities | 6C |
| VI | Recognition of deferred tax assets: Availability of future taxable profit against which tax losses carried forward can be used | 8 |
| VII | Impairment of Trade receivables: Expected credit loss | 11 |
| VIII | Recognition and measurement of provisions and contingencies; key assumption about the likelihood and magnitude of an outflow of resources | 17 & 33 |
| IX | Measurement of defined benefit obligation: Key actuarial assumptions | 34 |

### 3.3 Non-current assets held for sale

Non-current assets and disposal groups are classified as held for sale if their carrying amount will be recovered principally through a sale transaction rather than through continuing use. This condition is regarded as met only when the asset (or disposal group) is available for immediate sale in its present condition subject only to terms that are usual and customary for sale of such assets and its sales is highly probable.

Non-current assets classified as held for sale are measured at the lower of their carrying amount and fair value less costs to sell.

### 3.4 Revenue recognition

Revenue is recognised to the extent that it is probable that the economic benefits will flow to the Group and the revenue can be reliably measured, regardless of when the payment is being made. Revenue is measured at the fair value of the consideration received or receivable, taking into account contractually defined terms of payment and excluding taxes or duties collected on behalf of the government. Revenue is reduced for estimated customer returns, rebates and other similar allowances.

Based on the Educational Material on Ind AS 18 issued by the ICAI, the Group has assumed that recovery of excise duty flows to the Group on its own account. This is for the reason that it is a liability of the manufacturer which forms part of the cost of production, irrespective of whether the goods are sold or not. Since the recovery of excise duty flows to the Group on its own account, revenue is recorded inclusive of excise duty.

However, Goods and Service Tax (GST)/Sales Tax/Value Added Tax (VAT) is not received by the Group on its own account. Rather, it is tax collected on value added to the commodity by the seller on behalf of the government. Accordingly, it is excluded from revenue.

The specific recognition criteria described below must also be met before revenue is recognised.

#### 3.4.1 Sale of goods

Sales are accounted on transfer of significant risks and rewards of ownership to the buyer which generally coincides with dispatch of products to customers in case of domestic sales and on the basis of bill of lading in the case of export sales, at which time all the following conditions are satisfied:

- the Company has transferred to the buyer the significant risks and rewards of ownership of the goods;
- the Company retains neither continuing managerial involvement to the degree usually associated with ownership nor effective control over the goods sold;
- the amount of revenue can be measured reliably;
- it is probable that the economic benefits associated with the transaction will flow to the Company; and
- the costs incurred or to be incurred in respect of the transaction can be measured reliably.

#### 3.4.2 Rendering of services

The revenue from divisible contracts are recognised on the percentage completion method in respect of service contracts and in respect of supplies on dispatch. In respect of indivisible contracts, the revenues are recognised on a percentage completion method, synchronized to the billing schedules agreed by the customers.

In respect of maintenance service contracts, service income is recognised over the duration of the contract.

#### 3.4.3 Other income

**Royalty income** is recognised on an accrual basis in accordance with the substance of the relevant agreement.

**Dividend income** from investments is recognised when the shareholder's right to receive payment has been established.

**Interest income** from a financial asset is recognised and accrued using effective interest rate method.

**Rental income** is recognised on a straight line basis in accordance with the agreement.

### 3.5 Foreign Currencies

Foreign currency transactions are recorded at the rates of exchange prevailing on the date of the transactions. Monetary assets and liabilities outstanding at the year-end are translated at the rate of exchange prevailing at the year-end and the gain or loss, is recognised in the Statement of Profit and Loss.

Foreign currency monetary items (other than derivative contracts) of the respective Company, outstanding at the Balance Sheet date are restated at the year-end rates. Non-monetary items of the respective Company are carried at historical cost.

Exchange differences arising on settlement / restatement of short-term foreign currency monetary assets and liabilities of the respective Company are recognised as income or expense in the Statement of Profit and Loss.

Premium / discount on forward exchange contracts are amortised over the period of the contracts if such contracts relate to monetary items as at the Balance Sheet date. Any profit or loss arising on cancellation or renewal of such a forward exchange contract is recognised as income or as expense in the period in which such cancellation or renewal is made.

Refer Note: 3.26 and 3.27 for accounting for forward exchange contracts relating to firm commitments and highly probable forecast transactions.

### 3.6 Borrowing costs

The borrowing costs (other than those attributable to fixed assets - Refer Note: 4 and 5) are recognised in profit or loss in the period in which they are incurred.

Interest income earned on temporary investment of specific borrowings pending their expenditure on qualifying assets is deducted from the borrowing costs eligible for capitalisation.

### 3.7 Government grants

Government grants are not recognised until there is reasonable assurance that the Group will comply with the conditions attaching to them and that the grants will be received.

Government grants are recognised in profit or loss on a systematic basis over the periods in which the Group recognises as expenses the related cost for which the grants are intended to compensate. Specifically, government grants whose primary condition is that the Group should purchase, construct or otherwise acquire non-current assets are recognised as deferred revenue in the Balance Sheet and transferred to profit or loss on a systematic and rational basis over the useful lives of the related assets.

Government grants that are receivable as compensation for expenses or losses already incurred or for the purpose of giving immediate financial support to the Group with no future related costs are recognised in profit or loss in the period in which they become receivable.

The benefit of a government loan at a below market rate of interest is treated as a government grant, measured as the differences between proceeds received and the fair value of the loan based on prevailing market interest rate.

### 3.8 Employee benefits

#### 3.8.1. Retirement benefit costs and termination benefits

Payments to defined contribution retirement benefit plans are recognised as an expense when employees have rendered service entitling them to the contributions.

For defined benefit retirement plans, the cost of providing benefits is determined using the projected unit credit method, with actuarial valuations being carried out at the end of each annual reporting period. Remeasurement, comprising actuarial gain and loss, the effect of the changes to asset ceiling (if applicable) and the return on plan assets (excluding net interest), is reflected immediately in the Balance Sheet with a charge or credit recognised in other comprehensive income in the period in which they occur. Remeasurement recognised in other comprehensive income is reflected in retained earnings and is not reclassified to profit or loss. Past service cost is recognised in profit or loss in the period of plan amendment. Net interest is calculated by applying the rate at the beginning of the period to the net defined benefit liability or asset.

Defined benefit costs are categorised as follows:

- service cost (including current service cost, past service cost, as well as gains and losses on curtailments and settlements);
- net interest expense or income;
- remeasurement.

The Group presents the first two components of defined benefit costs in profit or loss in the line item 'Employee benefit expense'. Curtailment gain and loss are accounted for as past service costs.

A liability for a termination benefit is recognised at the earlier of which the entity can no longer withdraw the offer of the termination benefit and when the entity recognises any related restructuring costs.

#### 3.8.2. Short-term and other long-term employee benefits

A liability is recognised for benefits accruing to employees in respect of wages and salaries, annual leave and sick leave in the period the related service is rendered.

Liabilities recognised in respect of short-term employee benefits are measured at the undiscounted amount of the benefits expected to be paid in exchange for the related service.

Liabilities recognised in respect of other long-term employee benefits are measured at the present value of the estimated future cash outflows expected to be made by the Group in respect of services provided by employees up to the reporting date.

#### 3.8.3. Voluntary retirement compensation

Compensation to employees who have retired under voluntary retirement scheme is charged off to revenue

### 3.9 Share-based payment arrangements

Equity-settled share-based payments to employees and others providing similar services are measured at the fair value of the equity instruments at the grant date. Details regarding the determination of the fair value of equity settled share based transactions are set out in Note: 36 of Standalone financial statements.

The fair value determined at the grant date of the equity-settled-based payments is expensed on a straight-line basis over the vesting period, based on the Group's estimate of equity instruments that will eventually vest, with a corresponding increase in equity. At the end of each reporting period, the Group revises its estimate of the number of equity instruments expected to vest. The impact of the revision of the original estimates, if any, is recognised in profit or loss such that the cumulative expense reflect the revised estimate, with a corresponding adjustment to the Share options outstanding account.

### 3.10 Taxation

Income tax expense represents the sum of the tax currently payable and deferred tax.

#### 3.10.1 Current tax

The tax currently payable is based on taxable profit for the year. Taxable profit differs from 'profit before tax' as reported in the Statement of Profit and Loss because of items of income or expense that are taxable or deductible in other years (Temporary differences) and items that are never taxable or deductible (Permanent differences). Current tax is calculated using tax rates that have been enacted, at the reporting date in the countries where the Group operates and generates taxable income.

Current income tax assets and liabilities are measured at the amount expected to be recovered from or paid to the taxation authorities.

Current income tax relating to items recognised outside profit or loss is either in other comprehensive income or in equity. Current tax items are recognised in correlation to the underlying transaction either in OCI or directly in equity. Management periodically evaluates positions taken in the tax returns with respect to situations in which applicable tax regulations are subject to interpretation and establishes provisions where appropriate.

#### 3.10.2 Deferred tax

Deferred tax is recognised on temporary differences between the carrying amounts of assets and liabilities in the financial statements and the corresponding tax bases used in computation of taxable profit. Deferred tax liabilities are generally recognised for all taxable temporary differences. Deferred tax assets are generally recognised for all deductible temporary differences to the extent that it is probable that taxable profit will be available against which those deductible temporary differences can be utilised. Such deferred tax assets and liabilities are not recognised if the temporary differences arises from the initial recognition (other than in a business combination) of assets and liabilities in a transaction that affects neither the taxable profit nor the accounting profit. In addition deferred tax liabilities are not recognised if the temporary difference arises from the initial recognition of goodwill.

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply in the year when the asset is realised or the liability is settled, based on tax rates and tax laws that have been enacted or substantively enacted at the reporting date.

Deferred tax relating to items recognised outside profit or loss is recognised either in other comprehensive income or in equity. Deferred tax items are recognised in correlation to the underlying transaction either in OCI or directly in equity.

#### 3.10.3 Indirect taxes:

GST/CENVAT/VAT credit on materials purchased / services availed for production / Input services are taken into account at the time of purchase. Service tax input credit is accounted for in the books in the period in which the underlying service received is accounted and when there is no uncertainty in availing/utilising the credits. GST/CENVAT/VAT credit on purchase of capital items wherever applicable are taken into account as and when the assets are acquired. The GST/CENVAT credits so taken are utilised for payment of GST on supply and service/excise duty on goods manufactured or for payment of service tax on services rendered. The unutilised GST/CENVAT/VAT credit is carried forward in the books.

### 3.11 Property, plant and equipment

Land and buildings held for use in the production or supply of goods or services, or for administrative purposes, are stated in the Balance Sheet at cost less accumulated depreciation and accumulated impairment losses. Freehold land is not depreciated.

Fixtures and equipment are stated at cost less accumulated depreciation and accumulated impairment losses.

Depreciation is recognised so as to write off the cost of the assets (other than freehold land) less their residual values over their useful lives as specified under Schedule II and applicable statutes of the relevant territories, using the straight-line method. The estimated useful lives, residual value and depreciation method are reviewed at the end of each reporting period, with the effect of any changes in estimate accounted for on a prospective basis.

Assets held under finance lease are depreciated over their expected useful lives on the same basis as owned assets. However, when there is no reasonable certainty that ownership will be obtained by the end of the lease term, assets are depreciated over the shorter of the lease term and their useful lives.

Building on lease hold land are depreciated over the lease period if it is lower than the useful life mentioned in Schedule II.

Individual asset costing less than ₹5000 are depreciated in full in the year of acquisition.

An item of property, plant and equipment is derecognised upon disposal or when no future economic benefits are expected to arise from the continued use of the asset. Any gain or loss arising on the disposal or retirement of an item of property, plant and equipment is determined as the difference between the sale proceeds and the carrying amount of the asset and is recognised in profit or loss.

When significant parts of plant and equipment are required to be replaced at intervals, the Group depreciates them separately based on their specific useful lives. Likewise, when a major inspection is performed, its cost is recognised in the carrying amount of the plant and equipment as a replacement if the recognition criteria are satisfied. All other repair and maintenance costs are recognised in profit or loss as incurred. The present value of the expected cost for the decommissioning of an asset after its use is included in the cost of the respective asset if the recognition criteria for a provision are met.

An item of property, plant and equipment and any significant part initially recognised is derecognised upon disposal or when no future economic benefits are expected from its use or disposal. Any gain or loss arising on derecognition of the asset (calculated as the difference between the net disposal proceeds and the carrying amount of the asset) is included in the income statement when the asset is derecognised.

Borrowing costs directly attributable to the acquisition, construction or production of qualifying assets, which are assets that necessarily take a substantial period of time to get ready for their intended use or sale, are added to the cost of those assets, until such time as the assets are substantially ready for their intended use or sale.

### 3.12 Intangible assets

#### 3.12.1 Intangible assets acquired separately

Intangible assets that are acquired separately are carried at cost less accumulated amortisation and accumulated impairment losses. Amortisation is recognised on a straight-line basis over their estimated useful lives. The estimated useful life and amortisation method are reviewed at the end of each reporting period, with the effect of any changes in estimate being accounted for on a prospective basis. The amortisation expense on intangible assets with finite lives is recognised in the Statement of Profit and Loss unless such expenditure forms part of carrying value of another asset.

**3.12.2. Internally generated intangibles,** excluding capitalised development costs, are not capitalised and the related expenditure is reflected in profit or loss in the period in which the expenditure is incurred.

### 3.12.3. Intangible assets acquired in a business combination

Intangible assets acquired in a business combination and recognised separately from goodwill are initially recognised at their fair value at the acquisition date, which is regarded as their cost.

Subsequent to initial recognition, intangible assets acquired in a business combination are reported at cost less accumulated amortisation and accumulated impairment losses, on the same basis as intangible assets that are acquired separately.

### 3.12.4. Derecognition of intangible assets

An intangible asset is derecognised on disposal, or when no future economic benefits are expected from use or disposal. Gain or loss arising from derecognition of an intangible asset, measured as the difference between the net disposal proceeds and the carrying amount of the asset, are recognised in profit or loss when the asset is derecognised.

## 3.13 Impairment of tangible and intangible assets other than goodwill

At the end of each reporting period, the Group reviews the carrying amount of tangible and intangible assets to determine whether there is any indication that those assets have suffered an impairment loss. If any such indication exists, the recoverable amount of the assets is estimated in order to determine the extent of the impairment loss (if any). When it is not possible to estimate the recoverable amount of an individual asset, the Group estimates the recoverable amount of the cash-generating unit to which the asset belongs. When a reasonable and consistent basis of allocation can be identified, corporate assets are also allocated to individual cash-generating units.

Intangible assets with indefinite useful lives and intangible assets not yet available for use are tested for impairment at least annually, and whenever there is an indication that the asset may be impaired.

Recoverable amount is higher of fair value less cost of disposal and value in use. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset.

If the recoverable amount of an asset (or cash-generating unit) is estimated to be less than its carrying amount, the carrying amount of the asset (or cash-generating unit) is reduced to its recoverable amount. An impairment loss is recognised immediately in profit or loss.

When an impairment loss subsequently reverses, the carrying amount of the asset (or a cash-generating unit) is increased to the revised estimate of its recoverable amount, but so that the increased carrying amount does not exceed the carrying amount that would have been determined had no impairment loss been recognised for the asset (or cash-generated unit) in prior years. A reversal of an impairment loss is recognised immediately in profit or loss.

## 3.14 Cash and cash equivalents (for purposes of Cash Flow Statement)

Cash comprises cash on hand and demand deposits with banks. Cash equivalents are short-term balances (with an original maturity of three months or less from the date of acquisition), highly liquid investments that are readily convertible into known amounts of cash and which are subject to insignificant risk of changes in value.

## 3.15 Cash Flow Statement

Cash flows are reported using the indirect method, whereby profit/(loss) before tax is adjusted for the effects of transactions of non-cash nature and any deferrals or accruals of past or future cash receipts or payments. The cash flows from operating, investing and financing activities of the Group are segregated based on the available information.

## 3.16 Inventories

Inventories are stated at the lower of cost and net-realisable value. Cost includes freight, taxes and duties net of GST/CENVAT / VAT credit wherever applicable. Customs duty payable on material in bonded warehouse is added to the cost.

In respect of raw materials, stores and spare parts, traded stock cost is determined on weighted average basis. In respect of work in progress and finished goods, cost includes all direct costs and applicable production overheads, to bring the goods to the present location and condition. Net realisable value represents the estimated selling price for inventories less all estimated cost of completion and cost necessary to make the sale.

## 3.17 Provisions

Provisions are recognised when the Group has a present obligation (legal or constructive) as a result of a past event, it is probable that the Group will be required to settle the obligation, and a reliable estimate can be made of the amount of obligation.

The amount recognised as a provision is the best estimate of the consideration required to settle present obligation at the end of reporting period, taking into account the risk and uncertainty surrounding the obligation. When a provision is measured using the cash flows estimated to settle the present obligation, its carrying amount is the present value of these cash flows (when the effect of the time value of money is material).

When some or all of the economic benefits required to settle a provision are expected to be recovered from a third party, a receivable is recognised as an asset if it is virtually certain that reimbursement will be received and the amount of receivable can be measured reliably.

## 3.18 Contingent liabilities

Contingent liability is disclosed for (i) Possible obligation which will be confirmed only by future events not wholly within the control of the Group or (ii) Present obligations arising from past events where it is not probable that an outflow of resources will be required to settle the obligation or a reliable estimate of the amount of the obligation cannot be made. Contingent assets are not recognised in the financial statements.

### 3.19 Financial instruments

Financial assets and financial liabilities are recognised when the Group becomes a party to the contractual provision of the instruments.

Financial assets and financial liabilities are initially measured at fair value. Transaction costs that are directly attributable to the acquisition or issue of financial assets and financial liabilities (other than financial assets and financial liabilities at fair value through profit or loss) are added to or deducted from the fair value of the financial asset or financial liabilities, as appropriate, on initial recognition. Transaction cost directly attributable to the acquisition of financial assets or financial liabilities at fair value through profit or loss are recognised immediately in profit or loss.

### 3.20 Financial assets

All regular way purchases or sale of financial assets are recognised and derecognised on a trade date basis. Regular way purchases or sales are purchases or sale of financial assets that require delivery of assets within the time frame established by regulation or convention in the market place.

All recognised financial assets are subsequently measured in their entirety at either amortized cost or fair value, depending on the classification of the financial assets.

#### 3.20.1. Classification of financial assets

Debt instruments that meet the following conditions are subsequently measured at amortised cost (except for debt instruments that are designated as at fair value through profit or loss on initial recognition):

- the asset is held within business model whose objective is to hold assets in order to collect contractual cash flows; and
- the contractual terms of the instruments give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

For the impairment policy on financial assets measured at amortised cost, Refer Note: 3.20.4

#### 3.20.2 Investment in equity instruments at Fair value through Other Comprehensive Income [FVTOCI]

On initial recognition, the Group can make an irrevocable election (on an instrument- by instrument basis) to present the subsequent changes in fair value in other comprehensive income pertaining to investment in equity instruments. This election is not permitted if the equity investment is held for trading.

These elected investments are initially measured at fair value plus transaction costs. Subsequently, they are measured at fair value with gain and loss arising from changes in fair value recognised in other comprehensive income and accumulated in the 'Reserve for equity instrument through other comprehensive income'. The cumulative gain or loss is not reclassified to profit or loss on disposal of the investments.

A financial asset is held for trading if:

- it has been acquired principally for the purpose of selling it in the near term.
- on initial recognition it is part of a portfolio of identified financial instruments that the Group manages together and has a recent actual pattern of short-term profit-taking; or
- it is a derivative that is not designated and effective as a hedging instrument or a financial guarantee.

The Group has equity instrument in two entities, which are not held for trading. The Group has elected the FVTOCI irrevocable option for both of these investments (Refer Note: 6C). Fair value is determined in the manner described in Note: 35.

Dividend on these investments are recognised in profit or loss when the Group's right to receive the dividends is established, it is probable that the economic benefits associated with the dividend will flow to the entity, which does not represent a recovery of part of cost of the investment and the amount of dividend can be measured reliably. Dividend recognised in profit and loss are included in 'Other income' line item.

#### 3.20.3 Financial assets at fair value through profit or loss (FVTPL)

Investments in equity instruments are classified as at FVTPL, unless the Group irrevocably elects on initial recognition to present subsequent changes in fair value in other comprehensive income for investments in equity instruments which are not held for trading (Refer Note: 3.20.2).

Debt instruments that do not meet the amortised cost criteria or FVTOCI criteria are measured at FVTPL. In addition, debt instruments that meet the amortised cost criteria or the FVTOCI criteria but are designated as at FVTPL are measured at FVTPL.

A financial asset that meets the amortised cost criteria or debt instruments that meet the FVTOCI criteria may be designated as at FVTPL upon initial recognition if such designation eliminates or significantly reduces a measurement or recognition inconsistency that would arise from measuring assets or liabilities or recognising the gain or loss on them on different bases. The Group has not designated any such debt instrument as at FVTPL.

Financial asset at FVTPL is measured at fair value at the end of each reporting period, with gains or losses arising on remeasurement recognised in profit or loss. The net gain or loss recognised in profit or loss incorporate any dividend or interest earned on the financial asset and is included in the 'Other income' line item. Dividend on financial asset at FVTPL is recognised when the Group's right to receive the dividends is established. It is probable that the economic benefits associated with the dividend will flow to the Group which does not represent a recovery of part of cost of the investment and the amount can be measured reliably.

#### 3.20.4. Impairment of financial assets

The Group applied the expected credit loss model for recognising impairment loss on financial assets measured at amortised cost, debt instruments at FVTOCI, lease receivable, trade receivable, other contractual rights to receive cash or other financial asset, and financial guarantees not designated as at FVTPL.

Expected credit losses are the weighted average of credit losses with the respective risks of default occurring as the weights. Credit loss is the difference between all contractual cash flows that are due to the Group in accordance with the contract and all the cash flows that the Group expects to receive (i.e., all cash shortfalls), discounted at the original effective interest rate (or credit-adjusted effective interest rate for purchased or originated credit-impairment financial assets). The Group estimates cash flows by considering all contractual terms of the financial instrument (for example, prepayments, extension, call and similar options) through the expected life of that financial instruments.

The Group measures the loss allowance for the financial instruments at an amount equal to the lifetime expected credit losses if the credit risk on those financial instruments has increased significantly since initial recognition. If the credit risk on a financial instrument has not increased significantly since initial recognition, the Group measures the loss allowance for that financial instruments at an amount equal to 12 month expected credit losses. The twelve months expected credit losses are a portion of the lifetime cash shortfalls that will result if default occurs within 12 months after the reporting date and thus, are not cash shortfalls that are predicted over 12 months.

If the Group measured loss allowance for the financial instruments at life time expected credit loss model in the previous period, but determines at the end of a reporting period that the credit risk has not increased significantly since initial recognition due to improvement in credit quality as compared to the previous period, the Group again measures the loss allowance based on 12 month expected credit losses.

When making the assessment of whether there has been a significant increase in credit risk since initial recognition, the Group uses the change in the risk of a default occurring over the expected life of the financial instruments instead of the change in the amount of expected credit losses. To make the assessment, the Group compares the risk of a default occurring on the financial instrument as at the reporting date with the risk of a default occurring on the financial instrument as at the date of initial recognition and consider reasonable and supportable information, that is available without undue cost or effort, that is indicative of significant increase in credit risk since initial recognition.

For trade receivables or any contractual rights to receive cash or other financial assets that results from transactions that are within the scope of Ind AS 11 and Ind AS 18, the Group always measures the loss allowance at an amount equal to life time expected credit losses.

Further, for the purposes of measuring lifetime expected credit loss allowance for trade receivables, the Group has used a practical expedient as permitted under Ind AS 109. This expected credit loss allowance is computed based on a provision matrix which takes into account historical credit loss experience and adjusted for forward-looking information.

The impairment requirements for the recognition and measurement of a loss allowance are equally applied to debt instruments at FVTOCI except that the loss allowance is recognised in other comprehensive income and is not reduced from the carrying amount in the Balance Sheet.

### 3.20.5 Derecognition of financial assets

The Group derecognises a financial asset when the contractual rights to the cash flows from the asset expire, or when it transfers the financial asset and substantially all the risks and rewards of ownership of the asset to another party. If the Group neither transfers nor retains subsequently all the risks and rewards of ownership and continues to control the transferred asset, the Group recognises its retained interest in the asset and an associated liability for the amount it may have to pay.

If the Group retains substantially all the risks and rewards of ownership of a transferred financial asset, the Group continues to recognise the financial asset and also recognises a collateralised borrowing for the proceeds received.

On derecognition of a financial asset in its entirety, the difference between the asset's carrying amount and the sum of the consideration received and receivable and the cumulative gain or loss that had been recognised in other comprehensive income and accumulated in equity is recognised in profit or loss if such gain or loss would have otherwise been recognised in profit or loss on disposal of that financial asset.

On derecognition of a financial asset other than its entirety (eg., when the Group retains an option to repurchase part of a transferred asset), the Group allocates the previous carried over amount of financial asset between the part it continues to recognise under continuing involvement, and the part it no longer recognises on the basis of the relative fair values of those parts on the date of the transfer.

The difference between the carrying amount allocated to the part that is no longer recognised and the sum of consideration received for the part no longer recognised and any cumulative gain or loss allocated to it that had been recognised in profit or loss on disposal of that financial asset. A cumulative gain or loss that had been recognised in other comprehensive income is allocated between the part that continues to be recognised and the part that is no longer recognised on the basis of the relative fair value of those parts.

### 3.20.6 Foreign exchange gain and loss

The fair value of financial assets denominated in foreign currency is determined in that foreign currency and translated at the spot rate at the end of each reporting period.

- for Foreign currency denominated financial asset measured at amortised cost and FVTPL, the exchange differences are recognised in profit or loss except for those which are designated hedging instruments in a hedging relationship.
- Changes in the carrying amount of investments in equity instruments at FVTOCI relating to changes in foreign currency rates are recognised in other comprehensive income.
- For the purposes of recognising foreign exchange gain and loss, FVTOCI debt instruments are treated as financial assets measured at amortised cost. Thus, the exchange differences on the amortised cost are recognised in profit or loss and other changes in the fair value of FVTOCI financial asset are recognised in other comprehensive income.

### 3.21 Financial liabilities and equity instruments

#### 3.21.1 Classification as debt or equity

Debt and equity instruments issued by a Group are classified as either financial liabilities or as equity in accordance with the substance of the contractual arrangements and the definition of a financial liabilities and an equity instrument.

#### 3.21.2. Equity instruments

An equity instrument is a contract that evidences a residual interest in the asset of an entity after deducting all of its liabilities. Equity instruments issued by a Group is recognised at the proceeds received, net of direct issue costs.

#### 3.21.3. Financial liabilities

All financial liabilities are subsequently measured at amortised cost using the effective interest methods or at FVTPL.

However, financial liabilities that arise when a transfer of a financial asset does not qualify for derecognition or when the continuing involvement approach applies, financial guarantee contracts issued by the Group, and commitments issued by the Group to provide a loan at below-market interest rate are measured in accordance with the specific accounting policies set out below:

#### 3.21.3.1. Financial liabilities at FVTPL

Financial liabilities are classified as at FVTPL when the financial liability is either contingent consideration recognised by the Group as an acquirer in a business combination to which Ind AS 103 applies or is held for trading or it is designated as at FVTPL.

A financial liability is classified as held for trading if:

- it has been incurred principally for the purpose of repurchasing it in the near term; or
- on initial recognition, it is part of a portfolio of identified financial instruments that the Group manages together and has a recent actual pattern of short-term profit-taking; or
- it is a derivative that is not designated and effective as a hedging instrument.

A financial liability other than a financial liability held for trading or contingent consideration recognised by the Group as an acquirer in a business combination to which Ind AS 103 applies, may be designated as at FVTPL upon initial recognition if:

- such designation eliminates or significantly reduces a measurement or recognition inconsistency that would otherwise arise.
- the financial liability forms part of a group of financial asset or financial liabilities or both, which is managed and its performance is evaluated on a fair value basis, in accordance with the Group's documented risk management or investment strategy, and information about the grouping is provided internally on that basis; or
- it forms part of a contract containing one or more embedded derivatives, and Ind AS 109 permits the entire combined contracts to be designated as at FVTPL in accordance with Ind AS 109.

Financial liabilities at FVTPL are stated at fair value, with any gains or losses arising on remeasurement recognised in profit or loss. The net gain or loss recognised in profit or loss incorporates any interest paid on the financial liability and is included in the 'Other income' line item.

However, for not-held for trading financial liabilities that are designated as at FVTPL, the amount of change in the fair value of the financial liability that is attributable to changes in the credit risk of the liability recognised in other comprehensive income, unless the recognition of the effects of changes in the liability's credit risk in other comprehensive income would create or enlarge an accounting mismatch in profit or loss, in which case these effect of changes in credit risk are recognised in profit or loss. Changes in fair value attributable to a financial liability's credit risk that are recognised in other comprehensive income are reflected immediately in retained earnings and are not subsequently reclassified to profit or loss.

Gain or loss on financial guarantee contract and loan commitments issued by the Group that are designated by the Group as at fair value through profit or loss are recognised in profit or loss.

Fair value is determined in the manner described in Note: 35.

#### 3.21.3.2. Financial liabilities subsequently measured at amortised cost

Financial liabilities are not held-for-trading and are not designated as at FVTPL are measured at amortised cost at the end of subsequent accounting periods. The carrying amounts of financial liabilities that are subsequently measured at amortised cost are determined based on the effective interest method. Interest expenses that is not capitalised as part of cost of an asset is included in the 'Finance cost' line item.

The effective interest method is a method of calculating the amortised cost of a financial liability and of allocating interest income over the relevant period. The effective interest rate is the rate that exactly discounts estimated future cash payments (including all fees and points paid or received that form an integral part of the effective interest rate, transaction costs and other premiums or discounts) through the expected life of the financial liability or, (where appropriate), a shorter period, to the net carrying amount on initial recognition.

#### 3.21.3.3 Financial guarantee contracts

A financial guarantee contract is a contract that requires the issuer to make specified payments to reimburse the holder for a loss it incurs because a specified debtor fails to make payments when due in accordance with the terms of a debt instrument.

Financial guarantee contracts issued by a Group are initially measured at their fair value and, if not designated as at FVTPL, are subsequently measured at a higher of:

- the amount of loss allowance determined in accordance with impairment requirement of Ind AS 109; and
- the amount initially recognised less, when appropriate, the cumulative amount of income recognised in accordance with the principles of Ind AS 18.

#### 3.21.3.4 Foreign exchange gain and loss

For financial liabilities that are denominated in a foreign currency and are measured at amortised cost at the end of each reporting period, the foreign exchange gain and loss are determined based on the amortised cost of the instruments and are recognised in 'Other income'.

The fair value of financial assets denominated in foreign currency is determined in that foreign currency and translated at the spot rate at the end of each reporting period. For financial liabilities that are measured at FVTPL, the foreign exchange component forms part of the fair value gain or loss and is recognised in profit or loss.

#### 3.21.3.5 Derecognition of financial liabilities

The Group derecognises financial liabilities when, and only when, the Group's obligations are discharged, cancelled or have expired. An exchange between a lenders of debt instruments with substantially different terms is accounted for as an extinguishment of the original financial liability and the recognition of a new financial liability. Similarly, a substantial modification of the terms of an existing financial liability (whether or not attributable to the financial difficulty of the debtor) is accounted for as an extinguishment of the original financial liability and the recognition of a new financial liability. The difference between the carrying amount of the financial liability derecognised and the consideration paid and payable is recognised in profit or loss.

### 3.22 Segment reporting

The accounting policies adopted for Segment reporting are in line with the accounting policies of the Group with the following additional policies:

- Inter-segment revenue is accounted on the basis of transactions which are primarily determined based on market/fair value factors.
- Revenue and expenses have been identified to segments on the basis of their relationship to the operating activities of the Segment. Revenue and expenses, which relate to the enterprise as a whole and are not allocable to Segments on a reasonable basis have been included under "Un-allocated Corporate expenses".

### 3.23 Leases

Assets leased in its capacity as a lessee, where substantially all the risks and rewards of ownership vest are classified as finance leases. Such leases are capitalised at the inception of the lease at the lower of the fair value and the present value of the minimum lease payments and a liability is created for an equivalent amount. Each lease rental paid is allocated between the liability and the interest cost so as to obtain a constant periodic rate of interest on the outstanding liability for each year.

### 3.24 Earnings per share

Basic earnings per share is computed by dividing the profit/ (loss) after tax attributable to the Parent shareholder by the weighted average number of equity shares outstanding during the year. Diluted earnings per share is computed by dividing the profit/(loss) after tax attributable to the Parent shareholder as adjusted for dividend, interest and other charges to expense or income relating to the dilutive potential equity shares, by the weighted average number of equity shares considered for deriving basic earnings per share and the weighted average number of equity shares which could have been issued on the conversion of all dilutive potential equity shares.

Potential equity shares are deemed to be dilutive only if their conversion to equity shares would decrease the net profit per share from continuing ordinary operations. Potential dilutive equity shares are deemed to be converted as at the beginning of the period, unless they have been issued at a later date. The dilutive potential equity shares are adjusted for the proceeds receivable had the shares been actually issued at fair value (i.e. average market value of the outstanding shares). Dilutive potential equity shares are determined independently for each period presented. The number of equity shares and potentially dilutive equity shares are adjusted for share splits/reverse share splits and bonus shares, as appropriate.

### 3.25 Research and Development

All revenue expenditure related to research and development are charged to the respective heads on the Statement of Profit and Loss. Capital expenditure incurred on research and development is capitalised as fixed assets and depreciated in accordance with the depreciation policy of the Group.

### 3.26 Derivative financial instruments

Derivatives are initially recognised at fair value at the date the derivative contracts are entered into and are subsequently remeasured to their fair values at the end of each reporting period. The resulting gain or loss is recognised in profit or loss immediately unless the derivate is designated and effective as hedging instrument, in which event the timing of the recognition in profit or loss depends on the nature of the hedging relationship and the nature of the hedged item.

### 3.27 Hedge accounting

The Group designates certain hedging instruments, which includes derivatives and non-derivatives in respect of foreign currency risk, at either fair value hedges, cash flow hedges, or hedges of net investments in foreign operations. Hedges of foreign exchange risk on firm commitments are accounted for as cash flow hedges.

At the inception of the hedge relationship, the entity documents the relationship between the hedging instrument and the hedged item, along with its risk management objectives and its strategy for undertaking various hedge transactions. Furthermore, at the inception of the hedge and on an ongoing basis, the Group documents whether the hedging instrument is highly effective in offsetting changes in fair values or cash flows of the hedged item attributable to the hedged risk.

Note: 35 sets out details of the fair values of the derivatives instruments used for hedging purposes.

#### 3.27.1 Fair value hedges

Changes in fair value of the designated portion of derivatives that qualify as fair value hedges are recognised in profit or loss immediately, together with any changes in the fair value of the hedging asset or liability that are attributable to the hedged risk. The change in the fair value of the designated portion of hedging instrument and the change in the hedged item attributable to the hedged risk are recognised in profit or loss in the line item relating to the hedged item.

Hedge accounting is discontinued when the hedging instruments expires or is sold, terminated, or exercised, or when it no longer qualify for hedge accounting. The fair value adjustment to the carrying amount of the hedged item arising from the hedged risk is amortised to profit or loss from that date.

### 3.27.2 Cash flow hedges

The effective portion of changes in the fair value of derivatives that are designated and qualify as cash flow hedges is recognised in other comprehensive income and accumulated under the heading of cash flow hedging reserve. The gain or loss relating to the ineffective portion is recognised immediately in profit or loss, and is included in the 'Other income' line item.

Amount previously recognised in other comprehensive income and accumulated in equity relating to (effective portion as described above) are reclassified to profit or loss in the periods when the hedged item affect profit or loss, in the same line as the recognised hedged item. However, when the hedged forecast transaction results in the recognition of non-financial asset or a non-financial liability, such gain or loss are transferred from equity (but not as a reclassification adjustment) and included in the initial measurement of the cost of the non-financial asset or non-financial liability.

In cases, where the designated hedging instruments are options and forward contracts, the Group has an option, for each designation, to designate on an instrument only the changes in intrinsic value of the option and spot element of forward contract respectively as hedges. In such cases the time value of the options is accounted based on the type of hedged item which those options hedge.

In case of transaction related hedged item in the above cases, the change in time value of the options is recognised in other comprehensive income to the extent it relates to the hedged item and accumulated in a separate component of equity i.e.., Reserve for time value of options and forward elements of forward contract in hedging relationship. This separate component is removed and directly included in the initial cost or other carrying amount of the asset or the liability (i.e. not as a reclassification adjustment thus not affecting other comprehensive income) if the hedged item subsequently results in recognition of a non-financial asset or non-financial liability. In other cases, the amount accumulated is reclassified to profit or loss as a reclassification adjustment in the same period in which the hedged expected future cash flow affects profit or loss.

In case of time period related hedged item in the above cases, the change in time value of the options is recognised in other comprehensive income to the extent it relates to the hedged item and accumulated in a separate component of equity i.e.., Reserve for time value of options and forward elements of forward contracts in hedging relationship. The time value of options at the date of designation of the options in the hedging relationship is amortised on a systematic and rational basis over the period during which the options intrinsic value could affect profit or loss. This is done as a reclassification adjustment and hence affects other comprehensive income.

In cases where only the spot element of the forward contracts is designated in a hedging relationship and the forward element of the forward contract is not designated, the Group makes the choice for each designation whether to recognise the changes in forward element of fair value of the forward contracts in profit or loss or to account for this element similar to the time value of option (as described above).

Hedge accounting is discontinued when the hedging instrument expires or is sold, terminated, or exercised, or when it no longer qualifies for hedge accounting. Any gain or loss recognised in other comprehensive income and accumulated in equity at that time remains in equity and is recognised when the forecasted transactions is ultimately recognised in profit or loss. When a forecasted transaction is no longer expected to occur, the gain or loss accumulated in equity is recognised immediately in profit or loss.

## 3.28 Insurance claims

Insurance claims are accounted for on the basis of claims admitted/ expected to be admitted and to the extent that the amount recoverable can be measured reliably and it is reasonable to expect ultimate collection.

## 3.29 Operating cycle

Based on the nature of the products/activities of the Group and the normal time between acquisition of assets and their realisation in cash or cash equivalents, the Group has determined its operating cycle as 12 months for the purpose of classification of its assets and liabilities as current and non-current.

For the year ended March 31, 2018 (in Indian Rupees million, unless otherwise stated)

## 4. Property, plant and equipment

| Particulars | As at | |
|---|---|---|
| | 31.03.2018 | 31.03.2017 |
| **A. Carrying amounts** | | |
| Freehold land | 105.32 | 105.10 |
| Buildings | 1896.81 | 1823.17 |
| Plant and equipment | 4000.32 | 3743.61 |
| Furniture and fittings | 61.07 | 66.55 |
| Vehicles | 66.94 | 57.63 |
| Vehicles under finance lease | 13.55 | 21.67 |
| | **6144.01** | **5817.73** |
| **B. Capital work-in-progress** | **302.51** | **725.64** |

| Cost | Freehold land | Buildings (a) | Plant and equipment | Furniture and fittings | Vehicles | Vehicles under finance lease | Total |
|---|---|---|---|---|---|---|---|
| **Balance at March 31, 2016** | **104.54** | **1648.73** | **4154.57** | **75.93** | **75.31** | **26.92** | **6086.00** |
| Additions **(b)** | - | 264.63 | 1108.97 | 31.93 | 10.69 | 8.68 | 1424.90 |
| Disposals | - | (0.04) | (112.18) | (5.12) | (1.45) | (0.27) | (119.06) |
| Translation differences | 0.56 | 66.09 | 130.64 | 0.34 | 4.16 | - | 201.79 |
| **Balance at March 31, 2017** | **105.10** | **1979.41** | **5282.00** | **103.08** | **88.71** | **35.33** | **7593.63** |
| Additions **(b)** | - | 171.09 | 1148.74 | 13.89 | 27.55 | 1.99 | 1363.26 |
| Disposals | - | (4.82) | (82.88) | (8.04) | (3.49) | (5.74) | (104.97) |
| Translation differences | 0.22 | (1.16) | 6.45 | 0.25 | 0.80 | - | 6.56 |
| **Balance at March 31, 2018** | **105.32** | **2144.52** | **6354.31** | **109.18** | **113.57** | **31.58** | **8858.48** |

| Accumulated depreciation and impairment | Freehold land | Buildings | Plant and equipment | Furniture and fittings | Vehicles | Vehicles under finance lease | Total |
|---|---|---|---|---|---|---|---|
| **Balance at March 31, 2016** | **-** | **71.48** | **707.04** | **16.86** | **14.32** | **5.35** | **815.05** |
| Depreciation expense | - | 81.51 | 800.86 | 20.47 | 15.86 | 8.58 | 927.28 |
| Eliminated on disposals | - | - | (5.61) | (0.95) | (0.54) | (0.27) | (7.37) |
| Translation differences | - | 3.25 | 36.10 | 0.15 | 1.44 | - | 40.94 |
| **Balance at March 31, 2017** | **-** | **156.24** | **1538.39** | **36.53** | **31.08** | **13.66** | **1775.90** |
| Depreciation expense | - | 92.81 | 881.71 | 19.50 | 17.10 | 9.21 | 1020.33 |
| Eliminated on disposals | - | (1.78) | (67.96) | (8.01) | (2.38) | (4.84) | (84.97) |
| Translation differences | - | 0.44 | 1.85 | 0.09 | 0.83 | - | 3.21 |
| **Balance at March 31, 2018** | **-** | **247.71** | **2353.99** | **48.11** | **46.63** | **18.03** | **2714.47** |

For the year ended March 31, 2018 (in Indian Rupees million, unless otherwise stated)

| Carrying amounts | Freehold land | Buildings | Plant and equipment | Furniture and fittings | Vehicles | Vehicles under finance lease | Total |
|---|---|---|---|---|---|---|---|
| **Balance at March 31, 2016** | **104.54** | **1577.25** | **3447.53** | **59.07** | **60.99** | **21.57** | **5270.95** |
| Additions | - | 264.63 | 1108.97 | 31.93 | 10.69 | 8.68 | 1424.90 |
| Depreciation expense | - | (81.51) | (800.86) | (20.47) | (15.86) | (8.58) | (927.28) |
| Disposals (net) | - | (0.04) | (106.57) | (4.17) | (0.91) | - | (111.69) |
| Translation differences | 0.56 | 62.84 | 94.54 | 0.19 | 2.72 | - | 160.85 |
| **Balance at March 31, 2017** | **105.10** | **1823.17** | **3743.61** | **66.55** | **57.63** | **21.67** | **5817.73** |
| Additions | - | 171.09 | 1148.74 | 13.89 | 27.55 | 1.99 | 1363.26 |
| Depreciation expense | - | (92.81) | (881.71) | (19.50) | (17.10) | (9.21) | (1020.33) |
| Disposals (net) | - | (3.04) | (14.92) | (0.03) | (1.11) | (0.90) | (20.00) |
| Translation differences | 0.22 | (1.60) | 4.60 | 0.16 | (0.03) | - | 3.35 |
| **Balance at March 31, 2018** | **105.32** | **1896.81** | **4000.32** | **61.07** | **66.94** | **13.55** | **6144.01** |

| Capital work in progress movement | Total |
|---|---|
| **Balance at March 31, 2016** | **841.77** |
| Addition during the year | 1308.77 |
| Capitalised during the year | (1424.90) |
| **Balance at March 31, 2017** | **725.64** |
| Addition during the year | 940.13 |
| Capitalised during the year | (1363.26) |
| **Balance at March 31, 2018** | **302.51** |

**(a)** Includes ₹729.86 million (Previous year: ₹722.56 million) being cost of building on leasehold land.

**(b)** Includes Research and Development capital expenditure of ₹26.54 million (Previous year: ₹11.45 million) - Refer Note: 39(b) on Research & Development expenditure.

**(c) Capitalised borrowing cost:**

Borrowing costs capitalised on property, plant and equipment during the year ₹Nil (Previous year: ₹Nil).

**(d) Assets pledged as security:**

Immovable properties of the Parent carry pari-passu charge in favour of the consortium of bankers as security for banking facilities availed.

Plant & Machinery relating to a domestic subsidiary carry a charge in favour of a banker as security for the Term Loan availed.

The vehicles purchased through finance lease arrangement are hypothecated to the lessor.

**(e) Contractual obligations:**

Refer Note: 33 for disclosure of Contractual commitments for acquisition of property, plant and equipment.

For the year ended March 31, 2018 (in Indian Rupees million, unless otherwise stated)

## 5A. Goodwill on Consolidation

| Particulars | As at | |
|---|---|---|
| | 31.03.2018 | 31.03.2017 |
| Cost or deemed costs | 1188.75 | 1185.29 |
| Accumulated impairment losses | (37.34) | (37.34) |
| | **1151.41** | **1147.95** |

| Particulars | As at | |
|---|---|---|
| | 31.03.2018 | 31.03.2017 |
| Balance at beginning of the year | 1147.95 | 1214.51 |
| Add: Exchange difference during the year on translation of goodwill of foreign subsidiaries | 3.46 | (29.22) |
| Less: Impaired during the year | - | (37.34) |
| | **1151.41** | **1147.95** |

Total carrying amount of recoverable goodwill is based upon value in use and not based on fair value less cost of disposal.

**Accumulated Impairment losses**

The carrying amount of goodwill as at the year ended March 31, 2018 comprise of the goodwill initially recognised at the time of acquisition of Volzhsky Abrasives Works [VAW] & the balance relate to the goodwill recognised on acquisition of other subsidiaries.

**(i) Goodwill recognised at the time of acquisition of Volzhsky Abrasives Works [VAW]**

The goodwill recognised at the time of acquisition of VAW represents the significant portion of the total goodwill carried by the Group. This arose when VAW was acquired by the Group through its wholly owned subsidiary in FY 2007-08. The value in use is arrived at by discounting the cash flow projections using the financial budgets covering a period of three years, approved by the Board of directors of VAW and extrapolating it beyond three years using a growth rate of 5% p.a. The cash flows have been discounted using a rate of 15.1% p.a. This growth rate does not exceed the long term average growth rate. The Group believes that any reasonable further change in the key assumptions on which recoverable amount is based, would not cause the carrying amount to exceed its recoverable amount.

**(ii) Goodwill recognised at the time of acquisition of other entities**

This represents the goodwill recognised on the acquisition of other subsidiaries viz., Sterling Abrasives Ltd., Southern Energy Development Corporation Ltd. and CUMI (Australia) Pty Ltd. The aggregate values of the same are not significant. The Group believes that the carrying amount of the goodwill is recoverable.

For the year ended March 31, 2018 (in Indian Rupees million, unless otherwise stated)

## 5B. Other Intangible assets

| Particulars | As at | |
|---|---|---|
| | 31.03.2018 | 31.03.2017 |
| **(i) Carrying amounts** | | |
| Software | 20.66 | 13.15 |
| Technical know-how | 40.37 | 69.23 |
| **Total** | **61.03** | **82.38** |
| **(ii) Intangible assets under development** | **0.29** | **0.34** |

| Cost | Software | Technical know-how | Total |
|---|---|---|---|
| **Balance at March 31, 2016** | **24.68** | **118.94** | **143.62** |
| Additions **(a)** | 7.59 | 6.23 | 13.82 |
| Disposals | (0.09) | - | (0.09) |
| Translation differences | - | 0.18 | 0.18 |
| **Balance at March 31, 2017** | **32.18** | **125.35** | **157.53** |
| Additions **(a)** | 18.28 | - | 18.28 |
| Translation differences | - | (0.01) | (0.01) |
| **Balance at March 31, 2018** | **50.46** | **125.34** | **175.80** |

| Accumulated amortisation and impairment | Software | Technical know-how | Total |
|---|---|---|---|
| **Balance at March 31, 2016** | **10.35** | **27.36** | **37.71** |
| Amortisation expense | 8.76 | 28.77 | 37.53 |
| Disposals | (0.08) | - | (0.08) |
| Translation differences | - | (0.01) | (0.01) |
| **Balance at March 31, 2017** | **19.03** | **56.12** | **75.15** |
| Amortisation expense | 10.77 | 28.85 | 39.62 |
| **Balance at March 31, 2018** | **29.80** | **84.97** | **114.77** |

| Carrying amounts | Software | Technical know-how | Total |
|---|---|---|---|
| **Balance at March 31, 2016** | **14.33** | **91.58** | **105.91** |
| Additions | 7.59 | 6.23 | 13.82 |
| Amortisation expense | (8.76) | (28.77) | (37.53) |
| Disposals (net) | (0.01) | - | (0.01) |
| Translation differences | - | 0.19 | 0.19 |
| **Balance at March 31, 2017** | **13.15** | **69.23** | **82.38** |
| Additions | 18.28 | - | 18.28 |
| Amortisation expense | (10.77) | (28.85) | (39.62) |
| Translation differences | - | (0.01) | (0.01) |
| **Balance at March 31, 2018** | **20.66** | **40.37** | **61.03** |

**(a)** Includes Research & Development capital expenditure of ₹0.02 million (Previous year: ₹2.29 million) - Refer Note: 39(b) on Research & Development expenditure.

For the year ended March 31, 2018 (in Indian Rupees million, unless otherwise stated)

## 6A. Investments in Associate

| Particulars | As at | | | |
|---|---|---|---|---|
| | 31.03.2018 | | 31.03.2017 | |
| | No. of shares | Amount | No. of shares | Amount |
| Wendt (India) Ltd. [WENDT] | 797,352 | 484.89 | 797,352 | 447.77 |
| **Total Carrying value** | **797,352** | **484.89** | **797,352** | **447.77** |
| Book value of Quoted Investment | | 484.89 | | 447.77 |
| Market value of Quoted Investment | | 1946.73 | | 1511.98 |

| Name of the Associate | Nature of business | Place of incorporation and principal place of business | Proportion of ownership's interest/voting rights held by the Group As at | |
|---|---|---|---|---|
| | | | 31.03.2018 | 31.03.2017 |
| Wendt (India) Ltd. | Super abrasives | India | 39.87% | 39.87% |

The Group has consolidated the above Associate using equity method.

**Principal activities of the business:** A leading manufacturer of Super Abrasives (Diamond and Cubic Boron Nitride), Special purpose Grinding machine and tools, offering functionally superior products and services for grinding and machining "Hard - To - process Materials"

Pursuant to shareholders' agreement, the Parent has the right to cast 39.87% of the votes at shareholders' meeting of Wendt (India) Ltd. . The investment in this entity, is treated as an Associate, since in addition to the co-venturer (who holds similar stake as CUMI), general public also holds the remaining portion of shares. Hence the Group has not treated this investment as Joint venture investment.

**Summarised financial information of Associate**

The summarised financial information given below represents amount shown in the Associate's consolidated financial statements prepared in accordance with Ind AS adjusted by the Group for equity accounting purposes.

| Wendt (India) Ltd. | As at | |
|---|---|---|
| **Particulars** | **31.03.2018** | **31.03.2017** |
| Non-current assets | 623.16 | 666.49 |
| Current assets | 976.17 | 788.06 |
| Non-current liabilities | (48.86) | (79.62) |
| Current liabilities | (334.23) | (251.78) |

| Particulars | for the year | |
|---|---|---|
| | 2017-18 | 2016-17 |
| Revenue | 1541.92 | 1590.96 |
| Profit for the year | 131.24 | 120.51 |
| Other Comprehensive Income | 22.04 | (7.05) |
| Total Comprehensive Income | 153.28 | 113.46 |
| Dividend received from WENDT | 19.93 | 19.93 |

Reconciliation of the above summarised financial information to the carrying amount of the interest in Wendt (India) Ltd. recognised in consolidated financial statements is given below:

| Particulars | As at | |
|---|---|---|
| | 31.03.2018 | 31.03.2017 |
| Net assets of WENDT | 1216.24 | 1123.15 |
| Proportion of the Group's ownership interest in WENDT | 39.87% | 39.87% |
| Carrying amount of the Group's interest in WENDT | 484.89 | 447.77 |

Fair value of the Group's interest in Wendt (India) Ltd., which is listed in the Stock exchange of India as on 31st March 2018 was ₹1946.73 million (as at 31st March 2017 ₹1511.98 million)

For the year ended March 31, 2018 (in Indian Rupees million, unless otherwise stated)

| Particulars | As at | |
|---|---|---|
| | 31.03.2018 | 31.03.2017 |
| **I. Contingent liabilities:** Wendt (India) Ltd. | | |
| a. Directly incurred by the Group | - | - |
| b. Share of the Group which have been incurred with other investors | - | - |
| c. Group's share in relation to its interest in Associate | - | 2.37 |
| **II. Commitments - Capital:** Wendt (India) Ltd. | | |
| a. Directly incurred by the Group | - | - |
| b. Share of the Group which have been incurred with other investors | - | - |
| c. Group's share in relation to its interest in Associate | 13.62 | 14.69 |

## 6B. Investments in Joint Ventures

| Name of the Joint Ventures | As at | | | |
|---|---|---|---|---|
| | 31.03.2018 | | 31.03.2017 | |
| | No. of shares | Amount | No. of shares | Amount |
| **Unquoted Investment - Equity shares** | | | | |
| Murugappa Morgan Thermal Ceramics Ltd. [MMTCL] | 1,430,793 | 516.89 | 1,430,793 | 530.64 |
| Ciria India Ltd. [CIRIA] | 59,998 | 70.38 | 59,998 | 83.67 |
| **Total Carrying value** | | **587.27** | | **614.31** |
| Aggregate value of unquoted investments | | 587.27 | | 614.31 |

**Details of the Group's Joint Ventures at the end of the reporting period are as follows:**

| Name of the Joint Ventures | Nature of business | Place of incorporation and principal place of business | Proportion of ownership's interest/ voting rights held by the Group | |
|---|---|---|---|---|
| | | | 31.03.2018 | 31.03.2017 |
| Murugappa Morgan Thermal Ceramics Ltd. | Ceramics | India | 49% | 49% |
| Ciria India Ltd. | Ceramics | India | 30% | 30% |

**Nature of Business:**

a) MMTCL: Manufacture of complete range of ceramics fiber products.

b) CIRIA: Providing refractory engineering solutions and supply of refractory materials.

The Group has entered into Joint venture agreements with the co-venturer and hence the investment in the above entities are treated as Joint venture. Both the venturers have joint control on the entities. Accordingly, the Group has consolidated the above Joint ventures using equity method.

**Summarised financial information of Joint Ventures:**

The summarised financial information below represents the amount shown in the Joint venture's financial statements prepared in accordance with Ind AS adjusted by the group for equity accounting purposes.

**Murugappa Morgan Thermal Ceramics Ltd.**

| Particulars | As at | |
|---|---|---|
| | 31.03.2018 | 31.03.2017 |
| Non-current assets | 592.44 | 619.21 |
| Current assets | 720.00 | 727.85 |
| Non-current liabilities | (22.30) | (27.09) |
| Current liabilities | (235.25) | (237.02) |

For the year ended March 31, 2018 (in Indian Rupees million, unless otherwise stated)

**The above amount of assets and liabilities includes the following:**

| Particulars | As at | |
|---|---|---|
| | 31.03.2018 | 31.03.2017 |
| Cash and cash equivalents | 34.01 | 28.64 |
| Current financial liabilities (excluding trade payables and provisions) | - | - |
| Non-current financial liabilities (excluding trade payables and provisions) | - | - |

| Particulars | For the year | |
|---|---|---|
| | 2017-18 | 2016-17 |
| Revenue | 1351.64 | 1503.10 |
| Profit for the year | 145.94 | 217.33 |
| Other Comprehensive Income | 1.73 | (1.94) |
| Total Comprehensive Income | 147.67 | 215.39 |
| Dividend received from MMTCL | 71.54 | 157.39 |
| **The above profit for the year includes the following:** | | |
| Depreciation and amortisation | 73.49 | 81.82 |
| Interest income | 1.07 | 0.69 |
| Interest expense | - | - |
| Income tax expense | 77.80 | 108.87 |

Reconciliation of the above summarised financial information to the carrying amount of the interest in Murugappa Morgan Thermal Ceramics Ltd. recognised in the consolidated financial statements is given below:

| Particulars | As at | |
|---|---|---|
| | 31.03.2018 | 31.03.2017 |
| Net assets of MMTCL | 1054.89 | 1082.95 |
| Proportion of the Group’s ownership interest in MMTCL | 49% | 49% |
| Carrying amount of the Group’s interest in MMTCL | 516.89 | 530.64 |

**Ciria India Ltd.**

| Particulars | As at | |
|---|---|---|
| | 31.03.2018 | 31.03.2017 |
| Non-current assets | 47.86 | 41.77 |
| Current assets | 437.71 | 441.74 |
| Non-current liabilities | (6.70) | (7.04) |
| Current liabilities | (244.28) | (197.56) |

**The above amount of assets and liabilities includes the following:**

| Particulars | As at | |
|---|---|---|
| | 31.03.2018 | 31.03.2017 |
| Cash and cash equivalents | 22.63 | 55.62 |
| Current financial liabilities (excluding trade payables and provisions) | - | - |
| Non-current financial liabilities (excluding trade payables and provisions) | - | - |

| Particulars | For the year | |
|---|---|---|
| | 2017-18 | 2016-17 |
| Revenue | 775.15 | 988.21 |
| Profit for the year | 75.86 | 121.14 |
| Other Comprehensive Income | 0.18 | (0.06) |
| Total Comprehensive Income | 76.04 | 121.08 |
| Dividend received from CIRIA | 30.00 | 15.00 |
| **The above profit for the year includes the following:** | | |
| Depreciation and amortisation | 8.43 | 8.53 |
| Interest income | 0.00 | 0.00 |
| Interest expenses | - | - |
| Income tax expenses (income) | 35.18 | 63.19 |

Reconciliation of the above summarised financial information to the carrying amount of the interest in Ciria India Ltd. recognised in the consolidated financial statements is given below:

| Particulars | As at | |
|---|---|---|
| | 31.03.2018 | 31.03.2017 |
| Net assets of CIRIA | 234.59 | 278.91 |
| Proportion of the Group's ownership interest in CIRIA | 30.00% | 30.00% |
| Carrying amount of the Group's interest in CIRIA | 70.38 | 83.67 |

**Unrecognised share of losses of Joint Ventures: MMTCL & CIRIA**

| Particulars | For the year | |
|---|---|---|
| | 2017-18 | 2016-17 |
| The unrecognised share of loss on Joint Ventures for the year | - | - |
| Cumulative unrecognised share of loss of Joint Ventures | - | - |

The Joint ventures: Murugappa Morgan Thermal Ceramics Ltd. and Ciria India Ltd., cannot distribute its profits until it obtains the consent from both the venturers.

| Particulars | As at 31.03.2018 | | As at 31.03.2017 | |
|---|---|---|---|---|
| | MMTCL | CIRIA | MMTCL | CIRIA |
| **I. Contingent liabilities** | | | | |
| a. Directly incurred by the Group | - | - | - | - |
| b. Share of the Group which have been incurred along with other investors | - | - | - | - |
| c. Group's share in relation to its interest in Joint venture | 11.90 | 0.65 | 9.01 | 0.65 |
| **II. Commitments - Capital** | | | | |
| a. Directly incurred by the Group | - | - | - | - |
| b. Share of the Group which have been incurred along with other investors | - | - | - | - |
| c. Group's share in relation to its interest in Joint venture | 4.75 | - | 4.61 | - |

For the year ended March 31, 2018 (in Indian Rupees million, unless otherwise stated)

## 6C. Other Investments

| Particulars | As at | |
|---|---|---|
| | 31.03.2018 | 31.03.2017 |
| **(i) Non-current** | | |
| **(a) Investment in Equity instruments at FVTOCI** | | |
| **Quoted** | | |
| Coromandel Engineering Co. Ltd. | 144.85 | 118.22 |
| **Unquoted** | | |
| Murugappa Management Services Ltd. | 11.30 | 11.30 |
| **(b) Investments in Equity Instruments at FVTPL** | | |
| Quoted | 3.81 | 3.03 |
| Unquoted | 0.33 | 0.30 |
| **Total (a+b)** | **160.29** | **132.85** |
| Aggregate book value of quoted investments | 148.66 | 121.25 |
| Aggregate market value of quoted investments | 148.66 | 121.25 |
| Aggregate carrying value of unquoted investments | 11.63 | 11.60 |
| Aggregate amount of impairment in value of investments | - | - |
| **(ii) Current** | | |
| Instruments at Fair Value Through Profit or Loss (FVTPL) - Mutual fund | **570.49** | **49.64** |

| Category wise other investments - as per Ind AS 109 | As at | |
|---|---|---|
| | 31.03.2018 | 31.03.2017 |
| Financial asset measured at FVTPL - Equity instruments & Others | 574.63 | 52.97 |
| Financial asset measured at FVTOCI - Equity instruments | 156.15 | 129.52 |
| | **730.78** | **182.49** |

## 7. Other financial assets

| Particulars | As at | |
|---|---|---|
| | 31.03.2018 | 31.03.2017 |
| **A. Non-current** | | |
| Security deposits | **120.76** | **110.80** |
| | | |
| **B. Current** | | |
| Deposits | 0.28 | 0.03 |
| Advances to employees | 12.78 | 11.97 |
| Other receivables | | |
| Considered good | 41.60 | 42.48 |
| Considered doubtful | 1.11 | 0.92 |
| Less: Allowance for doubtful receivables | (1.11) | (0.92) |
| | **54.66** | **54.48** |

For the year ended March 31, 2018 (in Indian Rupees million, unless otherwise stated)

## 8. Deferred tax assets (net) and Deferred tax liabilities (net)

| Particulars | As at | |
|---|---|---|
| | 31.03.2018 | 31.03.2017 |
| **A. Deferred tax assets (net)** | **109.64** | **89.98** |
| **B. Deferred tax liabilities (net)** | **383.15** | **463.95** |

| Particulars | 2017-18 | | | | |
|---|---|---|---|---|---|
| | Balance as at 31.03.2017 | Recognised in Profit or Loss | Recognised in OCI | Translation adjustment | Balance as at 31.03.2018 |
| **A. Deferred tax assets (net)** | | | | | |
| Allowance for doubtful receivables and advances | 0.68 | 0.38 | - | - | 1.06 |
| Expenses allowed on payment/realisation basis | 21.88 | (2.63) | - | 1.40 | 20.65 |
| Accelerated depreciation for tax purposes | (12.50) | 5.94 | - | (3.25) | (9.81) |
| Tax losses | 60.77 | - | - | 6.22 | 66.99 |
| Tax on Unrealised profit on stock | 19.15 | 11.60 | - | - | 30.75 |
| **Total** | **89.98** | **15.29** | **-** | **4.37** | **109.64** |
| **B. Deferred tax liabilities (net)** | | | | | |
| Allowance for doubtful receivables and advances | (27.76) | (4.25) | - | 0.26 | (31.75) |
| Voluntary retirement scheme payments | (0.43) | (0.21) | - | - | (0.64) |
| Expenses allowed on payment/realisation basis | (54.56) | (13.91) | - | (0.09) | (68.56) |
| Principal portion of finance lease rentals | (1.69) | (0.27) | - | - | (1.96) |
| Cash flow hedges | 1.50 | - | (1.33) | - | 0.17 |
| Tax on undistributed profit | 89.04 | 8.64 | - | - | 97.68 |
| Accelerated depreciation for tax purposes | 457.85 | (69.16) | - | (0.48) | 388.21 |
| **Total** | **463.95** | **(79.16)** | **(1.33)** | **(0.31)** | **383.15** |
| **Movement during the year (B - A)** | **373.97** | **(94.45)** | **(1.33)** | **(4.68)** | **273.51** |

| Particulars | 2016-17 | | | | |
|---|---|---|---|---|---|
| | Balance as at 31.03.2016 | Recognised in Profit or Loss | Recognised in OCI | Translation adjustment | Balance as at 31.03.2017 |
| **A. Deferred tax assets (net)** | | | | | |
| Allowance for doubtful receivables and advances | - | 0.68 | - | - | 0.68 |
| Expenses allowed on payment/realisation basis | 21.73 | (0.83) | - | 0.98 | 21.88 |
| Accelerated depreciation for tax purposes | (18.00) | 7.32 | - | (1.82) | (12.50) |
| Tax losses | 54.74 | 2.89 | - | 3.14 | 60.77 |
| Tax on Unrealised profit on stock | 17.24 | 1.91 | - | - | 19.15 |
| **Total** | **75.71** | **11.97** | **-** | **2.30** | **89.98** |
| **B. Deferred tax liabilities (net)** | | | | | |
| Allowance for doubtful receivables and advances | (49.01) | 23.09 | - | (1.84) | (27.76) |
| Voluntary retirement scheme payments | (1.58) | 1.15 | - | - | (0.43) |
| Expenses allowed on payment/realisation basis | (52.63) | (0.62) | - | (1.31) | (54.56) |
| Principal portion of finance lease rentals | (0.92) | (0.77) | - | - | (1.69) |
| Cash flow hedges | 0.24 | - | 1.26 | - | 1.50 |
| Tax on undistributed profit | 86.83 | 2.21 | - | - | 89.04 |
| Accelerated depreciation for tax purposes | 500.50 | (42.86) | - | 0.21 | 457.85 |
| **Total** | **483.43** | **(17.80)** | **1.26** | **(2.94)** | **463.95** |
| **Movement during the year (B - A)** | **407.72** | **(29.77)** | **1.26** | **(5.24)** | **373.97** |

**(a)** Tax losses in respect of subsidiaries where the foreseeable business profits are estimated reasonably in the near future is considered for recognition of deferred tax assets in respective entities in compliance with tax laws of the respective countries.

**(b)** Deferred tax assets have not been recognised in respect of losses as they may not be used to offset taxable profit elsewhere in the Group, also they have arisen in subsidiaries that have been loss-making for sometime and there are no other tax planning opportunities or other evidence of recoverability in the near future.

For the year ended March 31, 2018 (in Indian Rupees million, unless otherwise stated)

## 9. Other assets

| Particulars | As at | |
|---|---|---|
| | 31.03.2018 | 31.03.2017 |
| **A. Non-current** | | |
| Capital advances | 62.08 | 104.17 |
| Prepayments | 136.81 | 138.81 |
| Deposits paid under protest relating to Sales tax, Value Added Tax, Central Excise and Service tax demands | 16.53 | 19.59 |
| Taxation (net of provisions) | 95.49 | 80.30 |
| | **310.91** | **342.87** |
| **B. Current** | | |
| Prepayments | 124.49 | 101.84 |
| Recoverable from Electricity Board - Banked power | - | 74.61 |
| Trade advance to Supplier | 210.30 | 223.48 |
| Balances with Statutory authorities | 172.32 | 272.15 |
| | **507.11** | **672.08** |

## 10. Inventories

| Particulars | As at | |
|---|---|---|
| | 31.03.2018 | 31.03.2017 |
| Raw materials | 1551.08 | 982.91 |
| Raw materials in transit | 124.20 | 68.95 |
| Work-in-progress | 898.95 | 887.74 |
| Stock-in-trade | 633.32 | 629.01 |
| Stock-in-trade in transit | 63.37 | 37.74 |
| Finished goods | 530.26 | 815.08 |
| Stores and spares | 579.06 | 445.54 |
| | **4380.24** | **3866.97** |

**a.** The mode of valuation of inventories has been stated in Note: 3.16.

**b.** The cost of inventories recognised as an expense (consumption) during the year was ₹9146.30 million (Previous year: ₹8098.65 million) and such expense includes ₹10.62 million towards reversal of write-down of inventory to net realisable value (the corresponding reversal amount for previous year, was ₹14.60 million). The write-down of inventory to net realisable value made in earlier years were reversed in current year as a result of increased realisations in certain markets/segments.

**c.** All the above inventories are expected to be recovered within twelve months.

## 11. Trade receivables (Unsecured)

| Particulars | As at | |
|---|---|---|
| | 31.03.2018 | 31.03.2017 |
| **Current** | | |
| Considered good | 4750.60 | 3805.83 |
| Doubtful | 103.66 | 101.57 |
| Allowance for doubtful receivables (expected credit loss allowance) | (103.66) | (101.57) |
| | **4750.60** | **3805.83** |

**a.** Trade receivables are generally due between 30 to 60 days. The Group's term includes charging of interest for delayed payment beyond agreed credit days. However, the entities under the Group exercises charging of interest after considering the historical trend, business prospects, reason for delay, market conditions etc.,

For the year ended March 31, 2018 (in Indian Rupees million, unless otherwise stated)

**b.** Credit risk is managed at the respective entity level. The credit limit and credit period are fixed for each customer after evaluating the financial position, past performance, business opportunities, credit references etc. The entities under the Group may consider credit rating when needed. The credit limit and the credit period are reviewed regularly at periodical intervals.

**c.** Concentration risk considers significant exposures relating to industry, counterparty, geography, currency etc. The concentration of credit risk is not significant due to the fact that the customer base is large and diversified.

The respective entities under the Group have used a practical expedient by computing the expected credit loss allowance for trade receivables based on provision matrix. The provision matrix takes into account historical credit loss experience and adjusted for forward looking information.

**d. Movement in the expected credit loss allowance**

| Particulars | As at | |
|---|---|---|
| | 31.03.2018 | 31.03.2017 |
| Balance at the beginning of the year | 101.57 | 146.65 |
| Movement in the expected credit loss allowance on trade receivables calculated at life time expected credit losses | 2.09 | (45.08) |
| | **103.66** | **101.57** |

## 12A. Cash and cash equivalents

| Particulars | As at | |
|---|---|---|
| | 31.03.2018 | 31.03.2017 |
| Balances with banks | 1256.21 | 1165.27 |
| Deposit account | 18.74 | 81.62 |
| Cash on hand | 1.39 | 1.50 |
| | **1276.34** | **1248.39** |

**Non-cash transactions:**

During the year, the Company has not entered into any non-cash transactions on investing and financing activities.

## 12B. Bank balances other than above

| Particulars | As at | |
|---|---|---|
| | 31.03.2018 | 31.03.2017 |
| Earmarked funds | **12.76** | **12.21** |

## 13. Equity Share Capital

| Particulars | As at | |
|---|---|---|
| | 31.03.2018 | 31.03.2017 |
| **Authorised share capital:** | | |
| 387,250,000 (as at March 31, 2017: 387,250,000) equity shares of ₹1 each | 387.25 | 387.25 |
| **Issued, Subscribed and Paid-up:** | | |
| 188,955,751 (as at March 31, 2017: 188,658,090) equity shares of ₹1 each fully paid | 188.96 | 188.66 |

For the year ended March 31, 2018 (in Indian Rupees million, unless otherwise stated)

**a) Reconciliation of the shares outstanding at the beginning and at the end of the reporting period**

| Particulars | As at 31.03.2018 | | As at 31.03.2017 | |
|---|---|---|---|---|
| **Equity shares with voting rights** | **No. of Shares** | **Value of Shares** | **No. of Shares** | **Value of Shares** |
| At the beginning of the year | 188,658,090 | 188.66 | 188,379,560 | 188.38 |
| Add: Shares issued against Employee Stock Option Scheme/Plan | 297,661 | 0.30 | 278,530 | 0.28 |
| At the end of the year | 188,955,751 | 188.96 | 188,658,090 | 188.66 |

The Company has received share application money for 1500 shares under Employee Stock Option Scheme 2007, which is pending for allotment. This receipt is shown under "Other equity" - Refer Note no: 14C .

**b) Terms/Rights attached to Equity Shares**

The Company has only one class of Equity shares having a par value of ₹1/- per share. Each holder of equity shares is entitled to one vote per share. Repayment of capital will be in proportion to the number of equity shares held.

**c) Dividend details**

An interim dividend of ₹1/- per share was declared at the meeting of the Board of Directors held on February 14, 2018 and the same has been paid (previous year an interim dividend of ₹1/- per share was declared at the meeting of the Board of Directors held on February 04, 2017 and the same has been paid).

Final dividend of ₹1.25 per share is proposed for the year ended March 31, 2018 (previous year final dividend of ₹0.75 was proposed and paid). The dividend proposed by the Board of Directors is subject to the approval of the shareholders in the ensuing Annual General Meeting, upon which the liability will be recorded in the books.

**d) Details of shares held by shareholders holding more than 5% of the aggregate shares in the Company**

| Name of Shareholder | As at | | | |
|---|---|---|---|---|
| | 31.03.2018 | | 31.03.2017 | |
| | No. of Shares held | % of holding | No. of Shares held | % of holding |
| Ambadi Investments Ltd.* | 56,054,244 | 29.67% | 3,121,960 | 1.65% |
| Murugappa Holdings Ltd.** | - | - | 55,432,284 | 29.38% |
| HDFC Trustee Company Ltd.* | 16,873,797 | 8.93% | 16,864,050 | 8.94% |

*Holdings combined based on the PAN of the shareholders.

** Merged with Ambadi Investments Ltd. (formerly known as Ambadi Investments Private Ltd.) w.e.f. 28th August 2017.

**e) Stock options granted under the Company's Employee Stock Option Scheme/Plan**

Stock options granted under the Company's Employee Stock Option Scheme/Plan pending exercise by option holders carry no right to dividend and voting rights. Further details of the Employee Stock Option Scheme/Plan are provided in Note: 36 of Standalone Financial Statements.

## Notes forming part of the Consolidated Financial Statements

**For the year ended March 31, 2018** (in Indian Rupees million, unless otherwise stated)

### 14.Other equity

| Particulars | As at | |
|---|---|---|
| | **31.03.2018** | **31.03.2017** |
| **A. Reserves and Surplus** | | |
| a. Profit on Forfeiture of Shares/Warrants | 6.03 | 6.03 |
| b. Capital redemption reserve | 27.68 | 27.68 |
| c. Capital reserve on consolidation | 706.77 | 704.65 |
| d. Securities premium | 226.19 | 194.15 |
| e. General reserve | 6730.94 | 6230.94 |
| f. Share options outstanding account | 30.84 | 16.08 |
| g. Retained earnings | 7360.98 | 6107.27 |
| **B. Items of Other Comprehensive Income** | | |
| h. Reserve for equity instruments | 84.42 | 57.79 |
| i. Effective portion of Cash flow Hedge | 0.25 | 1.82 |
| j. Foreign currency translation reserve | 256.47 | 269.05 |
| k. Revaluation surplus | 23.74 | 23.74 |
| **C. Share application pending allotment** | - | - |
| l. Share application pending allotment | 0.23 | - |
| **Total Other equity** | **15454.54** | **13639.20** |

**a. Profit on forfeiture of shares/warrants**

| Particulars | As at | |
|---|---|---|
| | **31.03.2018** | **31.03.2017** |
| Balance at the beginning of the year | 6.03 | 6.03 |
| Movements | - | - |
| **Balance at end of the year** | **6.03** | **6.03** |

During 1999, an amount of ₹6.03 million has been added on account of forfeiture of shares in the Parent company. This balance can be used in paying up unissued shares as fully paid bonus shares to the shareholders of the Parent company.

**b. Capital redemption reserve**

| Particulars | As at | |
|---|---|---|
| | **31.03.2018** | **31.03.2017** |
| Balance at the beginning of the year | 27.68 | 27.68 |
| Movements | - | - |
| **Balance at end of the year** | **27.68** | **27.68** |

During the year 2000-01, the Company bought back 2,768,000 shares at the then face value of ₹10 each at the price of ₹115 per share from the shareholders, pursuant to the offer of buy back of shares. A sum equal to nominal value of shares so bought back was transferred to capital redemption reserve account as per Companies Act, 1956. This reserve can be used in paying up unissued shares as fully paid bonus shares to the shareholders of the Company.

For the year ended March 31, 2018 (in Indian Rupees million, unless otherwise stated)

### c. Capital reserve on consolidation

| Particulars | As at | |
|---|---|---|
| | 31.03.2018 | 31.03.2017 |
| Balance at the beginning of the year | 704.65 | 720.22 |
| Movements due to translation impact | 2.12 | (15.57) |
| **Balance at end of the year** | **706.77** | **704.65** |

Capital reserve on consolidation was created on account of acquisition of step down subsidiary: Thukela Refractories Isithebe Pty Ltd.; Joint ventures: MMTCL & CIRIA; and Associate: WENDT, since the consideration paid was lower than the net worth of the acquiring company on the date of acquisition. The balance in this reserve will get transferred at the time of disposal of the relevant investment.

### d. Securities premium

| Particulars | As at | |
|---|---|---|
| | 31.03.2018 | 31.03.2017 |
| Balance at the beginning of the year | 194.15 | 166.61 |
| Movements | 32.04 | 27.54 |
| **Balance at end of the year** | **226.19** | **194.15** |

The Securities premium received during the year represents the premium received towards allotment of 297,661 shares. Cumulatively 2,247,751 equity shares were allotted during the period FY 2009-10 to FY 2017-18 under ESOP Scheme 2007 and ESOP Plan 2016 (Refer Note: 36 of Standalone Financial Statements towards details of the Scheme/Plan).

This balance will be utilised in accordance with the provisions of Section 52 of the Companies Act, 2013 towards issuance of fully paid bonus shares, write-off of preliminary expenses, commission/discount expenses on issue of shares/debentures, premium payable on redemption of redeemable preference shares/debentures and buy back of its own shares/securities under Section 68 of the Companies Act.

### e. General reserve

| Particulars | As at | |
|---|---|---|
| | 31.03.2018 | 31.03.2017 |
| Balance at the beginning of the year | 6230.94 | 5730.94 |
| Movements: Transfer from retained earnings | 500.00 | 500.00 |
| **Balance at end of the year** | **6730.94** | **6230.94** |

The general reserve is a free reserve, retained from Group's profits and can be utilized upon fulfilling certain conditions in accordance with statute of the relevant Act.

### f. Share options outstanding account

| Particulars | As at | |
|---|---|---|
| | 31.03.2018 | 31.03.2017 |
| Balance at the beginning of the year | 16.08 | 11.77 |
| Movements | 14.76 | 4.31 |
| **Balance at end of the year** | **30.84** | **16.08** |

Under Ind AS 102, fair value of the options granted is to be expensed out over the life of the vesting period as employee compensation costs reflecting period of receipt of service. Refer Note: 36 of Standalone Financial Statements for details.

For the year ended March 31, 2018 (in Indian Rupees million, unless otherwise stated)

### g. Retained earnings

| Particulars | As at | |
|---|---|---|
| | **31.03.2018** | **31.03.2017** |
| Opening Balance | 6107.27 | 5142.77 |
| Add: Profits for the year | 2155.96 | 1748.67 |
| Less: Other Comprehensive Income arising from remeasurement of defined benefit obligation net of tax | 5.99 | (31.33) |
| Less: Transfer to General reserve | (500.00) | (500.00) |
| Less: Final dividend paid | (141.51) | - |
| Less: Dividend tax on Final dividend paid | (14.92) | - |
| Less: Interim dividend | (188.93) | (188.63) |
| Less: Dividend tax on Interim dividend | (20.31) | (15.75) |
| Less: Dividend tax on Subsidiaries & Joint ventures | (42.57) | (48.46) |
| | **7360.98** | **6107.27** |

The amount that can be distributed by the Group as dividend to its equity shareholders is determined based on the financial position and dividend policy of the Group and in compliance with the applicable statutes.

### h. Reserve for equity instruments

| Particulars | As at | |
|---|---|---|
| | **31.03.2018** | **31.03.2017** |
| Balance at the beginning of the year | 57.79 | 111.95 |
| Movements | 26.63 | (54.16) |
| **Balance at end of the year** | **84.42** | **57.79** |

This reserve represents the cumulative gains and losses arising on the revaluation of equity instruments measured at fair value through other comprehensive income (Refer Note: 6C(i)), which will be reclassified to retained earnings when those assets are disposed off.

### i. Effective portion of Cash flow Hedge

| Particulars | As at | |
|---|---|---|
| | **31.03.2018** | **31.03.2017** |
| Balance at the beginning of the year | 1.82 | 0.30 |
| Movements | (1.57) | 1.52 |
| **Balance at end of the year** | **0.25** | **1.82** |

The hedging reserve represents the cumulative effective portion of gains or losses arising on changes in fair value of designated portion of hedging instruments entered into for cash flow hedges. The reserve will be reclassified to profit or loss when the hedged transaction impacts the profit or loss, or included as a basis adjustment to the non-financial hedged item.

For the year ended March 31, 2018 (in Indian Rupees million, unless otherwise stated)

### j. Foreign currency translation reserve

| Particulars | As at | |
|---|---|---|
| | 31.03.2018 | 31.03.2017 |
| Balance at the beginning of the year | 269.05 | (207.79) |
| Movements | (12.58) | 476.84 |
| **Balance at end of the year** | **256.47** | **269.05** |

Exchange differences relating to the translation of the results and net assets of the Group's foreign subsidiaries from their functional currencies to the Group's presentation currency (i.e. Indian Rupees) are recognised directly in Other Comprehensive Income and accumulated in the foreign currency translation reserve. Exchange differences accumulated in the foreign currency translation reserve are reclassified to Profit or Loss at the time of disposal of respective foreign operation.

### k. Revaluation surplus

| Particulars | As at | |
|---|---|---|
| | 31.03.2018 | 31.03.2017 |
| Balance at the beginning of the year | 23.74 | 23.74 |
| Movements | - | - |
| **Balance at end of the year** | **23.74** | **23.74** |

Land & Buildings of the Parent company added upto 31st August 1984 were revalued in 1984 based on the valuation done by an independent valuer. The value added on revaluation amounting to ₹58.41 million was credited to fixed asset revaluation reserve. The depreciation charged on the revalued portion was recouped every year from this reserve upto March 31, 2015 under previous GAAP.

### l. Share application money pending allotment

| Particulars | As at | |
|---|---|---|
| | 31.03.2018 | 31.03.2017 |
| Balance at the beginning of the year | - | - |
| Movements | 0.23 | - |
| **Balance at end of the year** | **0.23** | **-** |

Share application money pending for allotment under ESOP scheme. This represents the amount to the extent not refundable.

## 15. Non-Controlling Interest [NCI]

| Particulars | As at | |
|---|---|---|
| | 31.03.2018 | 31.03.2017 |
| Balance at beginning of the year | 656.63 | 621.61 |
| Share of Profit | 39.92 | 89.13 |
| Share of Other Comprehensive Income | (1.10) | 0.27 |
| Dividend paid to Non-Controlling Interest and its relevant tax thereon | (84.36) | (68.38) |
| Translation impact on Non-Controlling Interest of foreign subsidiaries | 3.65 | 14.00 |
| **Balance as at the end of the year** | **614.74** | **656.63** |

For the year ended March 31, 2018 (in Indian Rupees million, unless otherwise stated)

**Details of Non-Controlling Interests**

The table below shows details relating to Non-Controlling Interest in the entities which are not wholly owned by the Group.

| Name of the Subsidiary | Place of incorporation | Proportion of ownership | |
|---|---|---|---|
| | | 31.03.2018 | 31.03.2017 |
| Southern Energy Development Corporation Ltd. | India | 15.24% | 15.24% |
| Sterling Abrasives Ltd. | India | 40.00% | 40.00% |
| CUMI (Australia) Pty Ltd. | Australia | 48.78% | 48.78% |
| Volzhsky Abrasives Works | Russia | 2.56% | 2.56% |
| Foskor Zirconia (Pty) Ltd. | South Africa | 49.00% | 49.00% |

| Name of the Subsidiary | Accumulated Non-Controlling Interest | | Profit / (Loss) allocated to Non-Controlling Interest | | Other Comprehensive Income allocated to Non-Controlling Interest | |
|---|---|---|---|---|---|---|
| | As at | | For the year | | For the year | |
| | 31.03.2018 | 31.03.2017 | 2017-18 | 2016-17 | 2017-18 | 2016-17 |
| Southern Energy Development Corporation Ltd. | 26.93 | 35.23 | 7.72 | 9.38 | 0.01 | (0.17) |
| Sterling Abrasives Ltd. | 195.71 | 171.33 | 36.49 | 26.43 | (1.27) | 0.60 |
| CUMI (Australia) Pty Ltd. | 283.66 | 277.79 | 52.07 | 48.95 | - | - |
| Volzhsky Abrasives Works | 101.88 | 88.65 | 23.17 | 15.93 | - | - |
| Foskor Zirconia (Pty) Ltd. | 6.56 | 83.63 | (79.53) | (11.56) | 0.16 | (0.16) |
| **Total** | **614.74** | **656.63** | **39.92** | **89.13** | **(1.10)** | **0.27** |

Summarised financial information in respect of each of the Group's subsidiaries is set out below. The information below represents amounts before intragroup eliminations.

| Particulars | Southern Energy Development Corporation Ltd. | | Sterling Abrasives Ltd. | | CUMI (Australia) Pty Ltd. | |
|---|---|---|---|---|---|---|
| | As at | | As at | | As at | |
| | 31.03.2018 | 31.03.2017 | 31.03.2018 | 31.03.2017 | 31.03.2018 | 31.03.2017 |
| Non-Current assets * | 125.27 | 156.81 | 376.38 | 366.48 | 120.69 | 120.13 |
| Current assets | 60.38 | 83.80 | 332.81 | 288.98 | 579.48 | 557.19 |
| Non-Current liabilities | (0.28) | (0.19) | (24.03) | (29.73) | (7.28) | (3.50) |
| Current liabilities | (8.68) | (9.25) | (195.87) | (197.39) | (96.63) | (89.60) |
| **Equity attributable to owners of the Company** | **149.76** | **195.94** | **293.58** | **257.01** | **312.60** | **306.43** |
| **Non-Controlling Interest** | **26.93** | **35.23** | **195.71** | **171.33** | **283.66** | **277.79** |

* Southern Energy Development Corporation Ltd.: Non-current assets excludes fair valuation of the Parent company's shares held by it.

## Notes forming part of the Consolidated Financial Statements

**For the year ended March 31, 2018** (in Indian Rupees million, unless otherwise stated)

| Particulars | Southern Energy Development Corporation Ltd. | | Sterling Abrasives Ltd. | | CUMI (Australia) Pty Ltd. | |
|---|---|---|---|---|---|---|
| | For the year | | For the year | | For the year | |
| | **2017-18** | **2016-17** | **2017-18** | **2016-17** | **2017-18** | **2016-17** |
| Revenue | 246.43 | 271.07 | 816.39 | 722.35 | 917.28 | 837.80 |
| Expenses | (195.75) | (209.48) | (725.18) | (656.28) | (810.54) | (737.46) |
| **Profit/(Loss) for the year** | **50.68** | **61.59** | **91.21** | **66.07** | **106.74** | **100.34** |
| Profit/(Loss) attributable to owners of the Company | 42.96 | 52.21 | 54.72 | 39.64 | 54.67 | 51.39 |
| Profit/(Loss) attributable to the Non-Controlling Interest of the Company | 7.72 | 9.38 | 36.49 | 26.43 | 52.07 | 48.95 |
| **Profit/(Loss) for the year** | **50.68** | **61.59** | **91.21** | **66.07** | **106.74** | **100.34** |
| Other Comprehensive Income attributable to owners of the Company | 0.02 | (0.93) | (1.91) | 0.89 | - | - |
| Other Comprehensive Income attributable to Non-Controlling Interest of the Company | 0.01 | (0.17) | (1.27) | 0.60 | - | - |
| **Other Comprehensive Income for the year** | **0.03** | **(1.10)** | **(3.18)** | **1.49** | **-** | **-** |
| Total Comprehensive Income attributable to owners of the Company | 42.98 | 51.28 | 52.81 | 40.53 | 54.67 | 51.39 |
| Total Comprehensive Income attributable to Non-Controlling Interest of the Company | 7.73 | 9.21 | 35.22 | 27.03 | 52.07 | 48.95 |
| **Total Comprehensive Income for the year** | **50.71** | **60.49** | **88.03** | **67.56** | **106.74** | **100.34** |
| **Dividend paid to Non-Controlling Interests (including relevant tax thereon)** | **(16.03)** | **(5.91)** | **(10.83)** | **(8.12)** | **(48.55)** | **(43.87)** |
| | | | | | | |
| Net cash inflow/(outflow) from Operating activities | 82.58 | 79.54 | 104.49 | 98.46 | 60.77 | 109.98 |
| Net cash inflow/(outflow) from Investing activities | 22.77 | (40.53) | (36.66) | (26.40) | (7.23) | (5.27) |
| Net cash inflow/(outflow) from Financing activities | (105.19) | (38.76) | (67.24) | (74.03) | (99.53) | (91.37) |
| **Net cash inflow/(outflow)** | **0.16** | **0.25** | **0.59** | **(1.97)** | **(45.99)** | **13.34** |

| Particulars | Volzhsky Abrasives Works | | Foskor Zirconia (Pty) Ltd. | |
|---|---|---|---|---|
| | As at | | As at | |
| | **31.03.2018** | **31.03.2017** | **31.03.2018** | **31.03.2017** |
| Non-Current assets | 1432.34 | 1376.13 | 206.71 | 176.37 |
| Current assets | 2967.62 | 2495.56 | 505.90 | 521.40 |
| Non-Current liabilities | (70.78) | (61.61) | (272.33) | (241.22) |
| Current liabilities | (355.79) | (352.71) | (426.89) | (285.87) |
| **Equity attributable to owners of the Company** | **3871.51** | **3368.72** | **6.83** | **87.05** |
| **Non-Controlling Interest** | **101.88** | **88.65** | **6.56** | **83.63** |

# Notes forming part of the Consolidated Financial Statements

**For the year ended March 31, 2018** (in Indian Rupees million, unless otherwise stated)

| Particulars | Volzhsky Abrasives Works for the year | | Foskor Zirconia (Pty) Ltd. for the year | |
|---|---|---|---|---|
| | 2017-18 | 2016-17 | 2017-18 | 2016-17 |
| Revenue | 5941.28 | 4736.04 | 816.96 | 933.84 |
| Expenses | (5037.48) | (4114.61) | (979.27) | (957.43) |
| **Profit/(Loss) for the year** | **903.80** | **621.43** | **(162.31)** | **(23.59)** |
| Profit/(Loss) attributable to owners of the Company | 880.63 | 605.50 | (82.78) | (12.03) |
| Profit/(Loss) attributable to the Non-Controlling Interest of the Company | 23.17 | 15.93 | (79.53) | (11.56) |
| **Profit/(Loss) for the year** | **903.80** | **621.43** | **(162.31)** | **(23.59)** |
| Other Comprehensive Income attributable to owners of the Company | - | - | 0.18 | (0.17) |
| Other Comprehensive Income attributable to Non-Controlling Interest of the Company | - | - | 0.16 | (0.16) |
| **Other Comprehensive Income for the year** | **-** | **-** | **0.34** | **(0.33)** |
| Total Comprehensive Income attributable to owners of the Company | 880.63 | 605.50 | (82.60) | (12.20) |
| Total Comprehensive Income attributable to Non-Controlling Interest of the Company | 23.17 | 15.93 | (79.37) | (11.72) |
| **Total Comprehensive Income for the year** | **903.80** | **621.43** | **(161.97)** | **(23.92)** |
| **Dividend paid to Non-Controlling Interests (including relevant tax thereon)** | **(8.95)** | **(10.48)** | **-** | **-** |
| | | | | |
| Net cash inflow/(outflow) from Operating activities | 690.07 | 805.84 | (49.48) | 108.00 |
| Net cash inflow/(outflow) from Investing activities | (259.30) | (339.28) | (17.37) | (27.98) |
| Net cash inflow/(outflow) from Financing activities | (349.01) | (409.41) | 1.42 | (72.59) |
| **Net cash inflow/(outflow)** | **81.76** | **57.15** | **(65.43)** | **7.43** |

**For the year ended March 31, 2018** (in Indian Rupees million, unless otherwise stated)

## 16. Borrowings - Non Current

| Particulars | Maturity date | Repayment terms | Interest rate | As at 31.03.2018 | As at 31.03.2017 |
|---|---|---|---|---|---|
| **Secured - at Amortised Cost** | | | | | |
| Finance lease obligations (consisting of multiple contracts with varied maturities) **(a)** | Ranging from 2016 to 2022 | Monthly instalments | | 19.22 | 26.18 |
| Term loan from Bank | | | | 0.50 | 36.21 |
| **Unsecured - at Amortised Cost** | | | | | |
| Redeemable Preference Share obligations **(b)** | Year 2023 | On or before maturity date | 12.7% | 92.31 | 72.61 |
| | | | | **112.03** | **135.00** |
| **Less: Current maturities of: (Refer Note: 20)** | | | | | |
| - Term loans | | | | 0.50 | 35.76 |
| - Finance lease obligations | | | | 7.54 | 8.23 |
| - Redeemable Preference Share obligations | | | | 37.67 | 24.20 |
| **Total Non - Current Borrowings** | | | | **66.32** | **66.81** |

**a.** Secured by vehicles acquired under finance lease arrangement - Refer Note: 37.
**b.** Interest accrued on preference share capital added to loan amount.
**c.** As per amended provisions of Ind AS 7 Statement of Cash flows, the disclosure relating to "Changes in liabilities arising from financial activities" which is effective from period beginning 1st April 2017 is given below:

| **Net debts reconcilation:** | Note | 31.03.2018 | 31.03.2017 |
|---|---|---|---|
| Cash and Cash equivalents | 12A | 1276.34 | 1248.39 |
| Other investments (liquid) | 6C(ii) | 570.49 | 49.64 |
| Current borrowings | 18 | (1181.59) | (1424.47) |
| Non-Current borrowings (including current maturities) | 16 | (112.03) | (135.00) |
| **Net Cash/(Net debt)** | | **553.21** | **(261.44)** |

| Particulars | Other assets | | Liabilities from Financing activities | | Total |
|---|---|---|---|---|---|
| | Cash and Cash equivalents | Other investments (liquid) | Current borrowings | Non Current borrowings (including current maturities) | |
| Net Cash/(Net debt) as at 31st March 2017 | 1248.39 | 49.64 | (1424.47) | (135.00) | (261.44) |
| Changes from Financing Cash flows | 28.20 | 520.85 | 273.56 | 33.36 | 855.97 |
| The effect of changes in foreign exchange rates | (0.25) | - | (30.68) | (10.39) | (41.32) |
| Net Cash/(Net debt) as at 31st March 2018 | 1276.34 | 570.49 | (1181.59) | (112.03) | 553.21 |

For the year ended March 31, 2018 (in Indian Rupees million, unless otherwise stated)

## 17. Provision

| Particulars | As at | |
|---|---|---|
| | 31.03.2018 | 31.03.2017 |
| **A. Non-Current** | | |
| Employee benefits | **91.69** | **75.52** |
| **B. Current** | | |
| Employee benefits | **170.59** | **161.34** |

The movement represents the provision created for the year arising out of the valuation after considering the actual settlements made during the year.

## 18. Borrowings - Current

| Particulars | As at | |
|---|---|---|
| | 31.03.2018 | 31.03.2017 |
| **Unsecured - at amortised cost** | | |
| Other borrowings | 574.86 | 879.23 |
| Cash credit (repayable on demand) | 508.95 | 454.26 |
| **Secured - at amortised cost (a)** | | |
| Cash credit (repayable on demand) | 97.78 | 90.98 |
| | **1181.59** | **1424.47** |

**(a)** The funding facility availed by one of the domestic subsidiary is secured by its current assets.

## 19. Trade payables

| Particulars | As at | |
|---|---|---|
| | 31.03.2018 | 31.03.2017 |
| Total outstanding dues to Micro and Small enterprises | 16.21 | 18.15 |
| Other Trade payables | 1959.46 | 1632.08 |
| | **1975.67** | **1650.23** |

**a.** Trade payables are non-interest bearing and are normally settled within the agreed due dates, generally ranging from 30 to 60 days.

**b.** All the payables are settled within the credit period as per pre-agreed terms. The entities in the Group have financial risk management policies in place to ensure that the payments are made within agreed period.

## 20. Other financial liabilities

| Particulars | As at | |
|---|---|---|
| | 31.03.2018 | 31.03.2017 |
| **Current** | | |
| **Secured** | | |
| Current maturities of Long term loan (Refer Note: 16) | 0.50 | 35.76 |
| Current maturities of Finance lease obligations (Refer Note: 16) | 7.54 | 8.23 |
| **Unsecured** | | |
| Current maturities of Redeemable Preference Share obligation (Refer Note: 16) | 37.67 | 24.20 |
| Unclaimed and Unpaid dividends | 18.96 | 17.59 |
| Remuneration payable to Directors | 21.32 | 21.44 |
| Deposits | 45.54 | 37.98 |
| Payable relating to Capital expenditure | 63.77 | 82.54 |
| Other payables | 472.31 | 443.07 |
| | **667.61** | **670.81** |

For the year ended March 31, 2018 (in Indian Rupees million, unless otherwise stated)

## 21. Other current liabilities

| Particulars | As at | |
|---|---|---|
| | 31.03.2018 | 31.03.2017 |
| Advances from Customers | 92.81 | 74.11 |
| Statutory liabilities | 97.54 | 150.49 |
| | **190.35** | **224.60** |

## 22. Revenue from operations

| Particulars | For the year | |
|---|---|---|
| | 2017-18 | 2016-17 |
| **a. Gross Sales/Income from Operations** | | |
| Sale of products (including Excise duty of ₹274.07 million for the year 2017-18 and ₹1198.59 million for the year 2016-17) - Refer Note: 31 "Segmental Disclosure" for breakup of sales. | 23131.10 | 21597.22 |
| Sale of services/Income from Contracts | 447.55 | 401.80 |
| | **23578.65** | **21999.02** |
| **b. Other operating income** | | |
| Service income | 94.12 | 88.43 |
| Commission income | 0.10 | 1.49 |
| Scrap Sales | 89.46 | 115.39 |
| Miscellaneous income | 189.35 | 119.12 |
| | **373.03** | **324.43** |
| **Total Revenue from operations ( a + b )** | **23951.68** | **22323.45** |

Gross Sales/Income from operations reported above are exclusive of excise duty effective from July 01, 2017 due to implementation of Goods and Service Tax. The comparative figures excluding excise duty is summarised below:

| Particulars | For the year | |
|---|---|---|
| | 2017-18 | 2016-17 |
| Gross Sales/Income from Operations (inclusive of excise duty) | 23578.65 | 21999.02 |
| Less: Excise duty on Sales | 274.07 | 1198.59 |
| **Gross Sales/Income from Operations (exclusive of excise duty)** | **23304.58** | **20800.43** |

## Notes forming part of the Consolidated Financial Statements

**For the year ended March 31, 2018** (in Indian Rupees million, unless otherwise stated)

### 23. Other Income

| Particulars | | For the year | |
|---|---|---|---|
| | | 2017-18 | 2016-17 |
| (a) | **Dividend Income** | | |
| | Dividend Income from Long term Investments | 5.39 | 2.48 |
| | Dividend Income from Current Investments | 9.21 | 20.24 |
| | | **14.60** | **22.72** |
| (b) | **Interest Income earned on financial assets that are not designated as at fair value through profit or loss [FVTPL]** | | |
| | Interest Income | | |
| | from banks | 31.19 | 25.39 |
| | from others | 4.35 | 7.58 |
| | | **35.54** | **32.97** |
| (c) | **Net gain/(loss) arising on financial assets mandatorily measured at FVTPL** | | |
| | (Refer Note: 6C (i) & (ii) investment schedule) | **0.78** | **0.75** |
| | | | |
| (d) | **Other non-operating income** | | |
| | Profit on sale of assets | 9.70 | 19.97 |
| | Profit on sale of Investments (net) | - | 0.38 |
| | Profit on exchange fluctuation (net) | 51.16 | - |
| (e) | **Other non-operating income** | | |
| | Provision for expenses no longer required written back | 17.61 | 40.63 |
| | Reversal of impairment losses on financial assets | 30.94 | 90.41 |
| | Rental income | 1.52 | 1.92 |
| | Miscellaneous income | 67.32 | 18.25 |
| | | **178.25** | **171.56** |
| | **Total Other Income (a + b + c + d )** | **229.17** | **228.00** |

### 24. Changes in inventories of finished goods, stock-in-trade and work in progress

| Particulars | | For the year | |
|---|---|---|---|
| | | 2017-18 | 2016-17 |
| Opening stock | | | |
| Work-in-progress | | 887.74 | 916.06 |
| Stock-in-trade (includes in-transit) | | 666.75 | 728.26 |
| Finished goods | | 815.08 | 722.86 |
| | **(A)** | **2369.57** | **2367.18** |
| Less: Closing stock | | | |
| Work-in-progress | | 898.95 | 887.74 |
| Stock-in-trade (includes in-transit) | | 696.69 | 666.75 |
| Finished goods | | 530.26 | 815.08 |
| | **(B)** | **2125.90** | **2369.57** |
| | | | |
| **(Accretion)/Decretion to stock (A) - (B)** | | **243.67** | **(2.39)** |

### 25. Employee benefit expense

| Particulars | For the year | |
|---|---|---|
| | 2017-18 | 2016-17 |
| Salaries, wages and bonus | 2475.95 | 2148.06 |
| Contribution to provident and other funds | 177.85 | 159.01 |
| Voluntary retirement compensation | 1.35 | 0.90 |
| Share based payments to employees (ESOPs) - Refer Note: 36 of Standalone Financial Statements | 14.76 | 4.31 |
| Remuneration to Managing Director | 22.43 | 19.99 |
| Welfare expenses | 416.80 | 402.79 |
| | **3109.14** | **2735.06** |

For the year ended March 31, 2018 (in Indian Rupees million, unless otherwise stated)

## 26. Finance costs

| Particulars | For the year | |
|---|---|---|
| | 2017-18 | 2016-17 |
| Interest costs | | |
| - on Fixed loans | 23.04 | 104.43 |
| - on Others | 53.86 | 69.93 |
| Other borrowing costs | 9.22 | 6.84 |
| | **86.12** | **181.20** |

## 27. Depreciation and amortisation expense

| Particulars | For the year | |
|---|---|---|
| | 2017-18 | 2016-17 |
| Depreciation of property, plant and equipment - Refer 4A | 1020.33 | 927.28 |
| Amortisation of intangible assets - Refer 5B(i) | 39.62 | 37.53 |
| | **1059.95** | **964.81** |

## 28. Other expenses

| Particulars | For the year | |
|---|---|---|
| | 2017-18 | 2016-17 |
| Consumption of stores and spares **(a)** | 816.18 | 750.03 |
| Power and fuel **(b)** | 3274.69 | 2525.16 |
| Rent | 90.60 | 78.05 |
| Excise duty on stock differential **(c)** | (67.39) | 7.85 |
| Rates and taxes | 103.25 | 145.67 |
| Insurance | 42.86 | 40.78 |
| Repairs to: **(d)** | | |
| - Buildings | 92.98 | 126.69 |
| - Machinery | 834.62 | 748.91 |
| - Others | 7.68 | 8.46 |
| Data Processing Charges | 127.68 | 123.61 |
| Technical Fee / Royalty | 92.64 | 83.03 |
| Directors' Sitting fees | 1.94 | 1.57 |
| Commission to Non-wholetime Directors | 15.60 | 14.82 |
| Auditors' remuneration (including other auditors) | 14.41 | 14.19 |
| Travel and Conveyance | 232.89 | 230.49 |
| Freight, delivery and shipping charges | 776.65 | 642.41 |
| Selling commission | 90.33 | 90.65 |
| Advertisement and publicity | 62.23 | 78.87 |
| Printing, stationery and communication | 58.10 | 61.83 |
| Professional fees | 223.94 | 187.21 |
| Impairment loss on financial assets | 6.90 | 59.80 |
| Less: Provision adjusted | - | (58.44) |
| | 6.90 | 1.36 |
| Allowance for doubtful receivables and advances | 33.22 | 78.38 |
| Services outsourced | 1302.85 | 1161.95 |
| Loss on sale of assets | 10.63 | 10.16 |
| Impairment of Non-current assets | - | 37.34 |
| Loss on exchange fluctuation (net) | - | 194.37 |
| Miscellaneous expenses | 287.25 | 252.04 |
| | **8532.73** | **7695.88** |

**(a)** Includes consumption of packing materials amounting ₹399.27 million (Previous year: ₹336.80 million).

**(b)** Net of own power generation, which includes energy banked with Kerala State Electricity Board - ₹Nil (Previous year: ₹74.61 million) - Refer Note: 9B.

**(c)** Represents the excise duty differential on finished stocks; Consequent to implementation of Goods and Service tax, no excise duty is applicable on the closing stock of current year.

**(d)** Repairs includes consumption of stores and spares amounting to ₹280.83 million (Previous year: ₹246.38 million).

## Notes forming part of the Consolidated Financial Statements

**For the year ended March 31, 2018** (in Indian Rupees million, unless otherwise stated)

### 29. Income tax expense

| Particulars | | For the year | |
|---|---|---|---|
| | | **2017-18** | **2016-17** |
| **A. Income tax expense recognised in Profit and loss:** | | | |
| **a. Current tax** | | | |
| In respect of the current year | | 1114.72 | 810.61 |
| | | **1114.72** | **810.61** |
| | | | |
| **b. Deferred tax** | | | |
| In respect of the current year | | (94.73) | (29.76) |
| Adjustment to deferred tax attributable to changes in tax rates and laws | | 0.28 | (0.01) |
| | | **(94.45)** | **(29.77)** |
| **Total Income tax expense recognised during the year (net)** | | **1020.27** | **780.84** |
| | | | |
| **Income tax reconciliation:** | | | |
| **Profit before tax** | A | **3216.15** | **2618.64** |
| Less: Share of Profit from Associate and Joint ventures | B | 146.60 | 190.88 |
| **Profit from operations before share of profit of equity accounted investees and income tax** | C = (A-B) | **3069.55** | **2427.76** |
| Applied tax rate as per Parent jurisdiction | D | 34.608% | 34.608% |
| Income tax expense calculated at the tax rate of 34.608%, applicable to the Parent Company | E = C x D | 1062.31 | 840.20 |
| Total Tax expenses charged in Profit and Loss for the year | F | 1020.27 | 780.84 |
| **Differential tax impact** | G = (E-F) | **(42.04)** | **(59.36)** |
| **Differential tax impact due to the following (tax benefit)/tax expenses** | | | |
| Effect of Income that is exempt from taxation net of disallowances | | (0.75) | (7.07) |
| Effect of expenses that are not deductible in determining taxable profit | | 74.37 | 45.73 |
| Claim of weighted benefit relating to In-house Research & Development facilities | | (16.33) | (17.76) |
| Area based tax incentives | | - | (7.12) |
| Effect of increase in applicable tax rate in India | | 0.28 | (0.01) |
| Deferred tax benefit not recognised on the losses of Subsidiaries | | 58.94 | 29.65 |
| Effect of tax rate differentials in respect of subsidiaries operating in other jurisdictions | | (158.55) | (102.78) |
| **Total** | **G** | **(42.04)** | **(59.36)** |

**B. Income tax recognised in Other Comprehensive Income:**

| Particulars | For the year | |
|---|---|---|
| | **2017-18** | **2016-17** |
| Net gain on designated portion of hedging instruments in cash flow hedges | 1.33 | (1.26) |
| **Total income tax recognised in Other Comprehensive Income** | **1.33** | **(1.26)** |
| | | |
| Bifurcation of the income tax recognised in Other Comprehensive Income into: | | |
| Items that will not be reclassified to profit or loss | - | - |
| Items that will be reclassified to profit or loss | 1.33 | (1.26) |

For the year ended March 31, 2018 (in Indian Rupees million, unless otherwise stated)

### 30. Earnings per share

| Particulars | For the year | |
|---|---|---|
| | **2017-18** | **2016-17** |
| Basic earnings per share (₹) | 11.42 | 9.28 |
| Diluted earnings per share (₹) | 11.39 | 9.25 |
| The calculation of Basic and Diluted Earnings per share is based on the following data: | | |
| Consolidated Net Profit for the year after taxes | 2155.96 | 1748.67 |
| Weighted average number of equity shares outstanding during the year | | |
| - Basic | 188,783,979 | 188,513,561 |
| - Dilutive | 189,356,441 | 189,030,648 |

The weighted average number of equity shares: for the purpose of diluted earnings per share reconciles with the basic earnings per share as given below:

| Particulars | For the year | |
|---|---|---|
| | **2017-18** | **2016-17** |
| Weighted average number of equity shares used in the calculation of basic earnings per share | 188,783,979 | 188,513,561 |
| Shares deemed to be issued for no consideration in respect of: | | |
| - Employee Stock Option Scheme/Plan | 572,462 | 517,087 |
| Weighted average number of equity shares used in the calculation of diluted earnings per share | 189,356,441 | 189,030,648 |

### 31. Segment information

The Group provides solutions majorly for five industrial manufacturing needs by developing, manufacturing and marketing products using the properties of materials known as electrominerals.

The Business Group Management Committee headed by Managing Director (CODM) consists of Chief Financial Officer, Leaders of Strategic Business Units and Human resources reviews the performance of the Company and has identified three core reportable business segments organised using differences in products and services.

- Surface engineering (material removal, cutting, polishing) known as Abrasives. Abrasive segment comprise of Bonded, Coated, Processed cloth, Polymers, Power tools and Coolants.
- Technical ceramics and super refractory solutions to address wear protection, corrosion resistance, electrical resistance, heat protection and ballistic protection known as Ceramics.
- Electrominerals for surface engineering, refractories, energy and environment. It includes fused alumina, silicon carbide, zirconia, speciality minerals and captive power generation from hydel power plant.

Besides the above three core segments, the Group has a power generation entity to serve its power requirements of the core business segments. The Group also has an IT services company which provides IT infrastructure Facility management services, software application development services, remote infrastructure management services and IT security management services.

The Business Group Management Committee monitors the operating results of its business segments for the purpose of making decisions about resource allocation and performance assessment using profit or loss and return on capital employed.

# Notes forming part of the Consolidated Financial Statements

**For the year ended March 31, 2018** (in Indian Rupees million, unless otherwise stated)

| Particulars | Abrasives | | Ceramics | | Electrominerals | | Power | | IT Services | | Eliminations | | Total | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2017-18 | 2016-17 | 2017-18 | 2016-17 | 2017-18 | 2016-17 | 2017-18 | 2016-17 | 2017-18 | 2016-17 | 2017-18 | 2016-17 | 2017-18 | 2016-17 |
| **Revenue** | | | | | | | | | | | | | | |
| External Sales - Gross | 10350.30 | 10149.19 | 4909.50 | 4595.34 | 7774.45 | 6711.83 | 53.54 | 68.44 | 43.31 | 72.42 | - | - | 23131.10 | 21597.22 |
| Income from Contracts | - | - | 117.55 | 103.15 | - | - | - | - | 330.00 | 298.65 | - | - | 447.55 | 401.80 |
| Inter segment sales | 13.15 | 13.55 | 40.49 | 25.89 | 1112.07 | 981.67 | 185.26 | 196.91 | 27.65 | 22.73 | (1378.62) | (1240.75) | - | - |
| **Gross Sales / Income from Operations** | **10363.45** | **10162.74** | **5067.54** | **4724.38** | **8886.52** | **7693.50** | **238.80** | **265.35** | **400.96** | **393.80** | **(1378.62)** | **(1240.75)** | **23578.65** | **21999.02** |
| **Results** | | | | | | | | | | | | | | |
| Segment result - EBITDA | 1631.14 | 1400.48 | 1043.09 | 982.21 | 1672.82 | 1253.39 | 105.26 | 125.20 | 49.18 | 42.37 | - | - | 4501.49 | 3803.65 |
| Depreciation/amortisation | (309.76) | (279.44) | (281.32) | (277.89) | (401.40) | (342.77) | (41.10) | (40.73) | (12.74) | (9.29) | - | - | (1046.32) | (950.12) |
| Profit on sale of Fixed Assets (Net) | 3.30 | 11.93 | (3.18) | (0.21) | (1.93) | (2.07) | 0.02 | - | (0.24) | 0.01 | - | - | (2.03) | 9.66 |
| Unallocated corporate expenses (Net) | | | | | | | | | | | | | (348.39) | (311.06) |
| Interest expense | | | | | | | | | | | | | (86.12) | (181.20) |
| Profit from Associate | | | | | | | | | | | | | 52.32 | 48.05 |
| Profit from Joint ventures | | | | | | | | | | | | | 94.28 | 142.83 |
| Interest and dividend income | | | | | | | | | | | | | 50.14 | 55.70 |
| Fair valuation of Investment | | | | | | | | | | | | | 0.78 | 0.75 |
| Profit on investment (net) | | | | | | | | | | | | | - | 0.38 |
| **Profit before tax** | **1324.68** | **1132.97** | **758.59** | **704.11** | **1269.49** | **908.55** | **64.18** | **84.47** | **36.20** | **33.09** | **-** | **-** | **3216.15** | **2618.64** |
| Less: Income taxes | | | | | | | | | | | | | 1020.27 | 780.84 |
| **Net profit after taxes** | | | | | | | | | | | | | **2195.88** | **1837.80** |
| Less: Non-controlling interest | | | | | | | | | | | | | 39.92 | 89.13 |
| **Profit for the year attributable to Owners of the Company** | | | | | | | | | | | | | **2155.96** | **1748.67** |
| **Other information:** | | | | | | | | | | | | | | |
| Segment assets | 6390.24 | 5830.80 | 4381.81 | 4191.91 | 6531.31 | 6236.96 | 92.84 | 134.28 | 164.61 | 156.05 | - | - | 17560.81 | 16550.00 |
| Unallocated corporate assets * | | | | | | | | | | | | | 3424.40 | 2672.22 |
| **Total assets** | **6390.24** | **5830.80** | **4381.81** | **4191.91** | **6531.31** | **6236.96** | **92.84** | **134.28** | **164.61** | **156.05** | - | - | **20985.21** | **19222.22** |
| Segment liabilities | 1365.08 | 1201.44 | 479.65 | 497.78 | 899.33 | 722.92 | 8.72 | 9.45 | 98.84 | 81.14 | - | - | 2851.62 | 2512.73 |
| Unallocated corporate liabilities | | | | | | | | | | | | | 1875.35 | 2225.00 |
| **Total liabilities** | **1365.08** | **1201.44** | **479.65** | **497.78** | **899.33** | **722.92** | **8.72** | **9.45** | **98.84** | **81.14** | - | - | **4726.97** | **4737.73** |
| Addition to Non-current assets | 347.54 | 356.86 | 228.89 | 290.93 | 322.06 | 581.89 | 0.42 | 1.20 | 12.06 | 24.00 | | | | |
| Depreciation & Amortization | 309.76 | 279.44 | 281.32 | 277.89 | 401.40 | 342.77 | 41.10 | 40.73 | 12.74 | 9.29 | | | | |
| Non-cash items other than depreciation and amortisation | 31.20 | 44.02 | 7.88 | 18.22 | 4.40 | 17.07 | - | - | 1.37 | 0.43 | | | | |
| Impairment on Non-current asset | - | 37.34 | - | - | - | - | - | - | - | - | | | | |

* includes Goodwill of ₹1151.41 million (Previous year: ₹1147.95 million), Investment in Associate and Joint Ventures under equity method - ₹1072.16 million(Previous year: ₹1062.08 million)

Sales between operating segments are carried out at arm's length basis and are eliminated at Group level consolidation.

The accounting policies of the reportable segments are same as that of Group's accounting policies described in Note: 3.22. Segment profit represents the profit before tax earned by each segment without allocation of central administration costs and directors' salaries, other income, as well as finance costs. This is the measure reported to the chief operating decision maker for the purposes of resource allocation and assessment of segment performance.

For the year ended March 31, 2018 (in Indian Rupees million, unless otherwise stated)

**Segment assets and liabilities**

For the purposes of monitoring segment performance and allocating resources between segments:

1. All assets are allocated to reportable segments other than investments, loans, current and deferred tax assets, unallocable current and non-current assets.
2. All liabilities are allocated to reportable segments other than borrowings, current and deferred tax liabilities, and unallocable current and non-current liabilities.

**Geographical information**

The Parent company is domiciled in India. The amount of its revenue from external customers are broken down by location of those customers and information about its non-current assets other than investment, other financial instruments and deferred tax assets are given below:

| | Revenue from external customer | | Non-current assets | |
|---|---|---|---|---|
| | For the year | | As at | |
| | 2017-18 | 2016-17 | 31.03.2018 | 31.03.2017 |
| India | 13047.56 | 12669.31 | 5183.30 | 5394.77 |
| Rest of the world | 10531.09 | 9329.71 | 2786.86 | 2722.14 |
| | 23578.65 | 21999.02 | 7970.16 | 8116.91 |

**Information about major customers**

No single customer contributed 10% or more to the Group's revenue during the years 2017-18 and 2016-17.

Gross Sales/Income from operations reported above are exclusive of excise duty effective from July 01, 2017 due to implementation of Goods and Service Tax. The comparative figures excluding excise duty is summarised below:

| Particulars | Abrasives | | Ceramics | | Electrominerals | | Power | | IT Services | | Eliminations | | Total | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2017-18 | 2016-17 | 2017-18 | 2016-17 | 2017-18 | 2016-17 | 2017-18 | 2016-17 | 2017-18 | 2016-17 | 2017-18 | 2016-17 | 2017-18 | 2016-17 |
| Gross Sales/Income from Operations (inclusive of excise duty) | 10363.45 | 10162.74 | 5067.54 | 4724.38 | 8886.52 | 7693.50 | 238.80 | 265.35 | 400.96 | 393.80 | (1378.62) | (1240.75) | 23578.65 | 21999.02 |
| Less: Excise duty on Sales | (179.17) | (783.64) | (42.70) | (210.40) | (52.20) | (204.55) | - | - | - | - | - | - | (274.07) | (1198.59) |
| Gross Sales/Income from Operations (exclusive of excise duty) | 10184.28 | 9379.10 | 5024.84 | 4513.98 | 8834.32 | 7488.95 | 238.80 | 265.35 | 400.96 | 393.80 | (1378.62) | (1240.75) | 23304.58 | 20800.43 |

For the year ended March 31, 2018 (in Indian Rupees million, unless otherwise stated)

## 32. Subsidiaries

| Name of Subsidiary | Nature of Business | Place of incorporation and operation | Proportion of ownership interest and voting power held by the Group | |
|---|---|---|---|---|
| | | | As at | |
| | | | 31.03.2018 | 31.03.2017 |
| Net Access India Ltd. | IT services | India | 100% | 100% |
| Southern Energy Development Corporation Ltd. | Power generation | India | 84.76% | 84.76% |
| Sterling Abrasives Ltd. | Manufacture/Trading of Abrasive products | India | 60% | 60% |
| CUMI (Australia) Pty Ltd. | Manufacture/Trading of Ceramic products & its related services | Australia | 51.22% | 51.22% |
| CUMI International Ltd. | Investment company | Cyprus | 100% | 100% |
| **Holdings through Subsidiary:** | | | | |
| Volzhsky Abrasive Works | Manufacture of Abrasive, Electromineral and Ceramic products | Volgograd, Russia | 97.44% | 97.44% |
| Foskor Zirconia (Pty) Ltd. | Manufacture of Electromineral products | South Africa | 51% | 51% |
| CUMI America Inc. | Trading of Abrasive & Ceramic products | USA | 100% | 100% |
| CUMI Middle East FZE | Trading of Abrasive & Ceramic products | Ras Al Khaimah, UAE | 100% | 100% |
| CUMI Abrasives & Ceramics Company Ltd. | Manufacture / Trading of Abrasive & Ceramic products | China | 100% | 100% |
| Thukela Refractories Isithebe Pty Ltd. | Manufacture of Ceramic & Electromineral products | South Africa | 100% | 100% |
| CUMI Europe s.r.o | Trading of Electromineral products | Czech Republic | 100% | 100% |

**Composition of the Group**

| Principal activity | Place of incorporation and operation | Number of wholly-owned subsidiaries | |
|---|---|---|---|
| | | As at | |
| | | 31.03.2018 | 31.03.2017 |
| Manufacture & Trading of Abrasive products | China, America, Middle East | 3 | 3 |
| Manufacture & Trading of Electromineral products | South Africa, Czech Republic | 2 | 2 |
| IT services provided | India | 1 | 1 |
| Investment company | Cyprus | 1 | 1 |
| | | **7** | **7** |

| Principal activity | Place of incorporation and operation | Number of non wholly-owned subsidiaries | |
|---|---|---|---|
| | | 31.03.2018 | 31.03.2017 |
| Manufacture & Trading of Abrasive products | India | 1 | 1 |
| Manufacture & Trading of Ceramic products | Australia | 1 | 1 |
| Manufacture & Trading of Electromineral products | South Africa, Russia | 2 | 2 |
| Power generation | India | 1 | 1 |
| | | **5** | **5** |

Details of the Non-Controlling Interest relating to non-wholly owned subsidiary to the Group are disclosed in Note: 15

For the year ended March 31, 2018 (in Indian Rupees million, unless otherwise stated)

## 33. Contingent Liabilities and Commitments in respect of which no provision is considered necessary

| S.No | Particulars | As at | |
|---|---|---|---|
| | | 31.03.2018 | 31.03.2017 |
| **A.** | **Contingent Liabilities:** | | |
| (a) | Outstanding letters of credit | 217.63 | 88.01 |
| (b) | Disputed income tax, sales tax, excise duty, service tax and customs duty demands which are under various stages of appeal proceedings. | 373.00 | 343.98 |
| (c) | Claims against the companies in the Group not acknowledged as debts: | | |
| | i. Disputed demands by Electricity Board | 43.34 | 43.34 |
| | ii. Contested Provident fund and ESI demands | 0.11 | 0.21 |
| | iii. Others | 55.83 | 86.40 |
| | | **99.28** | **129.95** |
| (d) | Employees demands pending before Labour Courts - quantum not ascertainable at present | | |
| | In respect of the above demands disputed by the Companies in the Group, appeals filed are pending before respective appellate authorities. Outflows, if any, arising out of these claims would depend on the outcome of the decision of the appellate authorities and the respective Company's rights for future appeals. No reimbursements are expected. | | |
| (e) | In respect of associate and joint ventures refer note 6A & 6B | | |
| **B.** | **Commitments:** | | |
| | Estimated amount of contracts remaining to be executed and not provided for: | | |
| | - Towards capital account | **139.86** | **169.20** |
| | - In respect of associate and joint ventures refer note 6A & 6B | | |

## 34. Employee Benefits

**A. Defined contribution plans:**

The Group operates defined contribution retirement benefit plans under various jurisdictions for all qualifying employees. The assets of the plans are held separately from those of respective companies under the control of trustees/Government organisations. Where employees leave the plans prior to full vesting of the contributions, the contributions payable by the respective companies in the Group are reduced by the amount of forfeited contributions.

| Particulars | For the year | |
|---|---|---|
| | 2017-18 | 2016-17 |
| Contribution to Provident fund and Other funds recognised in Profit and Loss | 147.54 | 133.07 |
| Amounts outstanding as at the end of the respective year and paid subsequently | 17.14 | 14.27 |

**Defined benefit plans:**

The Group sponsors defined benefit plans for qualifying employees of the Parent company and its subsidiaries, wherever applicable. The defined benefit plans are administered by an independent Fund that is legally separated from the respective entities.

Under the plans applicable to the Parent Company and its domestic subsidiaries, the employees are entitled to post-retirement yearly instalments amounting to 57.69% of final salary for each year of service until the retirement age of 58.

**These plans typically expose the Group to actuarial risks such as: Investment, Interest rate, longevity and salary escalation risk:**

**Investment risk:** The present value of the defined benefit plan liability (denominated in Indian Rupee) is calculated using a discount rate which is determined by reference to market yields at the end of the reporting period on government bonds. Currently, the investments are made in accordance with the guidelines under the applicable statutes.

**Interest risk:** A decrease in the bond interest rate will increase the plan liability; however, this will be partially offset by an increase in the return on the plan's debt investments.

**Longevity risk:** The present value of the defined benefit plan liability is calculated by reference to the best estimate of the mortality of plan participants both during and after their employment. An increase in the life expectancy of the plan participants will increase the plan's liability.

For the year ended March 31, 2018 (in Indian Rupees million, unless otherwise stated)

**Salary escalation risk:** The present value of the defined benefit plan liability is calculated with reference to the future salaries of plan participants. As such, an increase in the salary of the plan participants will increase the plan's liability.

In respect of the subsidiary in United Arab Emirates, the end of service benefits is accounted on time basis in full for every employee in the service of that entity in accordance with the provisions of the applicable labour laws of that country. The effect of these plans are regarded as immaterial considering the monetary impact to the Group.

In respect of the subsidiary in South Africa, the defined benefit plans provided to the employees are post retirement health benefits and long service awards. The liability is ascertained using actuarial valuation and is accounted accordingly. The effect of these plans are regarded as immaterial considering the monetary impact to the Group.

The actuarial valuation of the plan assets and the present value of the defined benefit obligations of the Parent Company and its subsidiaries in India were carried out as at March 31, 2018 by certified actuaries. The present value of the defined benefit obligation, and the related current service cost and past service cost, were measured using the projected unit credit method.

No other post-retirement benefits are provided to the employees. In respect of the contribution made to provident funds, the Parent guarantees the interest notified by the appropriate authority and to the extent of interest rate guaranteed, the liability is considered as defined benefit. For the financial year ended March 31, 2018, the interest yield is adequate to meet the guaranteed interest.

**Assumptions:**

The principal assumptions used for the purposes of the actuarial valuations are given below:

| Particulars | As at | |
|---|---|---|
| | **31.03.2018** | **31.03.2017** |
| Discount rate | 7.7% to 8% | 6.3% to 8% |
| Expected rate of return | 7.7% to 8% | 6.3% to 8% |
| Expected salary escalation | 5% to 7% | 5% to 10% |
| Mortality table used | Indian Assured Lives Mortality (2006-08) Ultimate | |

Estimates of future salary increase takes into account: inflation, seniority, promotion and other relevant factors, such as supply and demand in the employment market.

The details of actuarial valuation in respect of Gratuity liability is given below:

| Particulars | As at | |
|---|---|---|
| | **31.03.2018** | **31.03.2017** |
| i. Projected benefit obligation as at beginning of the year | 300.55 | 262.70 |
| Service cost | 27.76 | 25.34 |
| Interest cost | 20.53 | 20.25 |
| Remeasurement (gain)/loss: | | |
| Actuarial (gain)/loss arising from experience adjustments | (5.26) | 10.48 |
| Benefits paid | (27.73) | (18.22) |
| **Projected benefit obligation as at end of the year** | **315.85** | **300.55** |
| ii. Fair value of plan assets as at beginning of the year | 247.13 | 237.71 |
| Expected return on plan assets | 18.28 | 19.34 |
| Contributions | 26.64 | 25.75 |
| Benefits paid | (27.73) | (17.76) |
| Remeasurement gain/(loss): | | |
| Actuarial Gain/(losses) on plan assets | (1.67) | (17.91) |
| **Fair value of plan assets as at end of the year** | **262.65** | **247.13** |
| iii. Amount recognised in the Balance Sheet: | | |
| Projected benefit obligation at the end of the year | 315.85 | 300.55 |
| Fair value of the plan assets at the end of the year | 262.65 | 247.13 |
| **(Liability)/Asset recognised in the Balance Sheet-net** | **(53.20)** | **(53.42)** |
| iv. Cost of the defined benefit plan for the year: | | |
| Current service cost | 27.76 | 25.34 |
| Interest on obligation | 20.53 | 20.25 |
| Expected return on plan assets | (18.28) | (19.34) |
| **Components of defined benefit cost recognised in the Statement of Profit and Loss** | **30.01** | **26.25** |
| (included in Note: 25 Contribution to Provident and other funds) | | |
| **Remeasurement on the net defined benefit liability:** | | |
| Actuarial gain/loss arising from changes in demographic assumptions | (5.26) | 10.48 |
| Actuarial gain/loss arising from changes in financial assumptions | 1.67 | 17.91 |
| **Components of defined benefit costs recognised in Other Comprehensive Income** | **(3.59)** | **28.39** |
| **Total cost of the defined benefit plan for the year** | **26.42** | **54.64** |

For the year ended March 31, 2018 (in Indian Rupees million, unless otherwise stated)

**v Experience Adjustment**

| Particulars | As at | |
|---|---|---|
| | 31.03.2018 | 31.03.2017 |
| Present value of defined benefit obligation | 315.85 | 300.55 |
| Fair value of plan assets | 262.65 | 247.13 |
| Balance Sheet (Liability)/Asset | (53.20) | (53.42) |

| Particulars | For the year | |
|---|---|---|
| | 2017-18 | 2016-17 |
| Profit and Loss | 30.01 | 26.25 |
| Experience adjustment on plan liabilities (gain) / loss | (5.26) | 10.48 |
| Experience adjustment on plan assets gain / (loss) | (1.67) | (17.91) |

In the absence of the relevant information, the above details does not include the composition of plan assets and expected return on each category of plan assets.

The actual return on plan assets was ₹18.28 million (for the year ended March 31, 2017: ₹19.34 million).

Sensitivity analysis in respect of the actuarial assumptions used in calculation of defined benefit obligation is given below:

| Particulars | As at | |
|---|---|---|
| | 31.03.2018 | 31.03.2017 |
| Discount rate - 100 basis point higher | (292.92) | (277.62) |
| Discount rate - 100 basis point lower | 336.24 | 321.02 |
| Salary escalation rate - 100 basis point higher | 334.39 | 319.61 |
| Salary escalation rate - 100 basis point lower | (294.15) | (262.83) |
| Life expectancy rate - 100 basis point higher | 317.82 | 301.04 |
| Life expectancy rate - 100 basis point lower | (308.12) | (294.40) |

In the above table, positive figures indicate increase in the liability and negative figures indicate decrease in the liability. The weighted average duration of the benefit obligation as at March 31, 2018 is 15 years (as at March 31, 2017: 15 years).

The Group expects to make a contribution of ₹54.95 million (as at March 31, 2017: ₹53.42 million) to the defined benefit plans during the next financial year.

**B. Provident fund**

The actuary has assessed the calculations of the Interest Rate Guarantees based on the guidance note issued by the Institute of Actuaries of India. The disclosures required under Ind AS 19 is as set out below:

Fund and plan asset position are as follows:

| Particulars | As at | |
|---|---|---|
| | 31.03.2018 | 31.03.2017 |
| Plan asset at the end of the year | 1027.54 | 940.82 |
| Present value of benefit obligation at the end of the year | 986.00 | 767.86 |
| Surplus available | 41.54 | 172.96 |
| Asset recognised in the Balance Sheet | Not applicable since a separate Trust is maintained | |

The plan assets are primarily invested in Government securities.

For the year ended March 31, 2018 (in Indian Rupees million, unless otherwise stated)

Assumptions for present value of interest rate guarantee are as follows:

| Particulars | As at | |
|---|---|---|
| | 31.03.2018 | 31.03.2017 |
| Discount rate | 8.00% | 7.25% |
| Remaining term to maturity of portfolio (years) | 4.76 years | 5.87 years |
| Expected guaranteed rate(%) | 8.55% | 8.65% |
| Attrition rate | 2% | 2% |

## 35. Financial Instruments

### (i) Capital management

For the purpose of the Group's capital management, capital includes issued equity capital, share premium and all other equity reserves attributable to the equity holders of the parent. The primary objective of the Group's capital management is to maximise the shareholder value.

The Group's objective when managing capital is to:

- Safeguard their ability to continue as a going concern, so that they can continue to provide return for shareholders and benefits for other stakeholders and;
- maintain an optimal capital structure to reduce the weighted average cost of capital.

In order to maintain or adjust the capital structure, the Group may adjust the amount of dividend paid to shareholders, return capital to shareholders, issue new shares, or sell non-core assets to reduce the debt.

**Debt to Equity ratio**

| Particulars | As at | |
|---|---|---|
| | 31.03.2018 | 31.03.2017 |
| Debt (Long term borrowings, Short term borrowings & Current maturities of Long term borrowings) | 1293.62 | 1559.47 |
| Equity | 15643.50 | 13827.86 |
| Debt to Equity ratio | 8.27% | 11.28% |

**Loan Covenants:**
As on 31st March, 2018 there are no covenants applicable for long term loan outstanding.

### (ii) Categories of financial instruments

| Particulars | As at | |
|---|---|---|
| | 31.03.2018 | 31.03.2017 |
| **A. Financial assets** | | |
| **Measured at fair value through profit or loss (FVTPL): Mandatorily measured:** | | |
| - Equity and other investments | 574.63 | 52.97 |
| **Measured at amortised cost** | | |
| - Cash and bank balances | 1289.10 | 1260.60 |
| - Other financial assets | 4926.02 | 3971.11 |
| **Measured at fair value through Other Comprehensive Income (FVTOCI)** | | |
| - Investments in equity instruments designated upon initial recognition | 156.15 | 129.52 |
| **B. Financial liabilities** | | |
| Measured at amortised cost (including trade payable balances) | 3891.19 | 3812.32 |

**(iii) Financial risk management objectives**

The Group's activities expose it to market risk, liquidity risk and credit risk. The table given below explains the sources of risk which the Group is exposed to and how the Group manages the risk.

| Risk | Exposure arising from | Measurement | Management |
|---|---|---|---|
| a. Credit risk | Cash and cash equivalents, trade receivables, derivative financial instruments, financial assets measured at amortised cost | Ageing analysis<br>Credit ratings<br>Financial analysis | Diversification of Short term investments, review of credit limits and credit locks and secured mode of payment |
| b. Market risk | | | |
| i.Market risk - foreign exchange | Future commercial transactions Recognised financial assets and liabilities not denominated in Indian rupee (INR) | Cash flow forecasting<br>Sensitivity analysis | Forward foreign exchange contracts |
| ii. Market risk - interest rate | Long-term borrowings at variable rates | Sensitivity analysis | Market trends, Interest rate swaps |
| iii. Market risk - Price risk | Investment in securities | Sensitivity analysis | Portfolio diversification |
| c. Liquidity risk | Borrowings and other liabilities | Rolling cash flow forecasts | Availability of sanctioned credit lines and borrowing facilities |

The risk management is governed by policies developed in accordance with the Group guidelines and approved by the Board of Directors of the respective companies in the Group. They identify, evaluate and hedge financial risks in close co-ordination with their operating units.

**a. Credit risk:**

Credit risk is the risk that counterparty will not meet its obligations under a financial instrument or customer contract, leading to a financial loss. The Group is exposed to credit risk from its operating activities (primarily trade receivables) and from its financing activities, including deposits with banks and financial institutions, foreign exchange transactions and other financial instruments.

**a (i). Trade receivables**

Customer credit risk is managed by respective companies under the guidance of the credit policy, procedures and control relating to customer credit risk management. Credit quality of a customer is assessed based on financial position, past performance, business/economic conditions, market reputation, expected business etc. Based on that credit limit & credit terms are decided. Outstanding customer receivables are regularly monitored through credit lock and release to effectively manage the exposure.

An impairment analysis is performed at each reporting date on an individual basis for all the customers. The impairment is based on expected credit model considering the historical data. The maximum exposure to credit risk at the reporting date is the carrying value of each class of financial assets disclosed in Note: 11.

The Group has low concentration of risk with respect to trade receivables, as its customers are located in various geographies and belong to diversified industries and operate in largely independent markets.

**a (ii). Financial instruments and cash deposits**

Credit risk from balances with banks and financial institutions is managed by the respective Companies in accordance with their policy. Group recommends investments of surplus funds in short-term liquid funds and deposits with banks. The Investment limits are set out and are reviewed by the Board of Directors of the respective company on an quarterly basis. The maximum exposure to credit risk at the reporting date is the carrying value of each class of financial assets disclosed in Note: 6 & 12.

For the year ended March 31, 2018 (in Indian Rupees million, unless otherwise stated)

**b. Market risk**

Market risk is the risk that the fair value of future cash flows of a financial instrument will fluctuate because of changes in market prices. Market risk comprises of three types of risks: interest rate risk, currency risk and other price risk, such as equity price risk and commodity risk. Financial instruments affected by market risk include loans and borrowings, deposits, Investments (FVTOCI) and derivative financial instruments.

Market risk exposures are measured using sensitivity analysis. There has been no change to the Groups exposure to market risks or the manner in which these risks are being measured and managed.

**b (i). Foreign currency risk management**

Foreign currency risk is the risk that the fair value or future cash flows of an exposure will fluctuate because of changes in foreign exchange rates. Foreign exchange rate exposures are managed within policy parameters developed under guidelines of the Group and approved by Board of Directors of the respective companies. The Group recommends to its operating entities to perform, to the extent it is possible, their transactions in their functional currencies. Where this is not possible, the transactional currency risk may be hedged on an individual basis by currency forwards. The Group recommends hedging of around 50% of the net material exposure by currency. Exposures relating to capital expenditure beyond a threshold are hedged as per respective Company's policy at the time of commitment.

The carrying amounts of the Group's foreign currency denominated monetary assets and monetary liabilities based on gross exposure at the end of the reporting period are as under:

| Currency | Liabilities | | Assets | |
|---|---|---|---|---|
| | As at | | As at | |
| | 31.03.2018 | 31.03.2017 | 31.03.2018 | 31.03.2017 |
| US Dollar (USD) | 252.67 | 209.51 | 966.73 | 968.24 |
| Euro (EUR) | 207.62 | 37.17 | 646.01 | 546.59 |
| Great British Pound (GBP) | 0.07 | 0.61 | 3.51 | 12.19 |
| Russian Rouble (RUB) | - | 7.90 | - | - |

**Quantum of Forward contract (derivatives) (all of which identified as hedges) outstanding as at the end of the year (notional principal amount):**

The details of outstanding forward exchange contracts taken towards hedging the trade exposures as on the reporting date are given as under:

| Currency | Liabilities | | Assets | |
|---|---|---|---|---|
| | 31.03.2018 | 31.03.2017 | 31.03.2018 | 31.03.2017 |
| USD | 13.01 | 19.35 | 81.30 | 72.93 |

As at 31st March 2018 the outstanding forward exchange contracts were USD 1.25 million taken for receivable position and USD 0.2 million taken for payable position.

The value of the contracts outstanding currency wise is given below in the table:

| Contracts booked for | Currency | As at 31.03.2018 | | As at 31.03.2017 | |
|---|---|---|---|---|---|
| | | Number of contracts | Value | Number of contracts | Value |
| Export receivable | USD | 10 | 81.30 | 9 | 72.93 |
| Import payment | USD | 2 | 13.01 | 3 | 19.35 |

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**Foreign currency sensitivity analysis**

The Group is mainly exposed to US Dollar and Euro. The following table provides the sensitivity impact to a 10% strengthening or weakening of Indian rupee exchange rate against foreign currencies. The sensitivity analysis is done on net exposures. A positive number below indicates an increase in profit or equity when the Rupee weakens against the foreign currency and when net exposure is an asset.

| Currency impact in (₹ million) relating to the foreign currencies of: | As at 31.03.2018 | | As at 31.03.2017 | |
|---|---|---|---|---|
| | Profit or loss | Equity | Profit or loss | Equity |
| US Dollar (USD) | 71.41 | 75.21 | 70.51 | 75.05 |
| Euro (EUR) | 43.84 | 43.84 | 50.94 | 50.94 |
| Great British Pound (GBP) | 0.34 | 0.34 | 1.16 | 1.16 |
| Russian Rouble (RUB) | - | - | (0.79) | (0.79) |
| **Total** | **115.59** | **119.39** | **121.82** | **126.36** |

The Group sensitivity impact to foreign currency has decreased during the current year mainly due to the decrease in the value of exposure in Euro as at the end of the reporting period.

**b (ii). Interest rate risk management**

Interest rate risk is the risk that the fair value of future cash flows of a financial instrument will fluctuate because of changes in market interest rates. The Group has been availing the borrowings on a fixed and variable rate of interest. These borrowings are carried at amortised cost. The borrowings on a fixed rate of interest basis are not subject to the interest rate risk as defined in Ind AS 107, since neither the carrying amount nor future cash flows will fluctuate because of change in market interest rates. The borrowings on a variable rate of interest are subject to interest rate risk as defined in Ind AS 107.

| Classification of borrowings by nature of interest rate | As at | |
|---|---|---|
| | 31.03.2018 | 31.03.2017 |
| **Borrowings at variable interest rate** | | |
| - Non - Current | - | - |
| - Current | 1181.59 | 1459.63 |
| **Borrowings at fixed interest rate** | | |
| - Non - Current | 66.32 | 66.83 |
| - Current | 45.71 | 33.01 |
| **Total Borrowings** | **1293.62** | **1559.47** |

Current borrowings at variable interest rate represents cash-credit and term loan. The foreign currency term loans are benchmarked to USD 6 months LIBOR.

Since there are no non-current borrowings on variable interest rate as on 31st March 2018 & 2017, interest rate exposure is nil.

**b (iii). Price risks**

The Group is exposed to equity price risks arising from equity investments. Certain of the Group equity investments are held for strategic rather than trading purposes. The Group also holds certain other equity investments for trading purposes.

**Equity price sensitivity analysis**

The accumulated fair value change recognised on equity investment which are held for strategic purpose and designated at Fair value through other comprehensive income as at 31st March 2018 is ₹84.42 million (31st March 2017: ₹57.79 million) - Refer Note no: 14. The sensitivity analysis below have been determined based on the exposure to equity price risks at the end of the reporting periods. If equity prices moves-up or decreases by 5%, the impact to other comprehensive income and equity is given below:

| Movement of equity price | Impact to Other Comprehensive Income/equity | |
|---|---|---|
| | As at 31.03.2018 | As at 31.03.2017 |
| Increase by 5% | 7.24 | 5.91 |
| Decrease by 5% | (7.24) | (5.91) |

The impact of change in equity price on non-current investment recorded at Fair value through Profit and Loss and other investment designated as Fair value through Other comprehensive income is not significant.

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**c. Liquidity risk management**

The Group has established a liquidity risk management framework. The Group manages liquidity risk through cash generation from business and by having adequate banking facilities. The Group continuously monitors forecasts and actual cash flows, and by matching the maturity profiles of financial assets and liabilities.

**Contractual maturities of financial liabilities**

The table below provides details regarding the contractual maturities of financial liabilities including estimated interest payments as at 31st March 2018:

| Particulars | Carrying amount | upto 1 year | 1-3 years | 3-5 years | More than 5 years | Total contracted cash flows |
|---|---|---|---|---|---|---|
| **Non-current financial liabilities** | | | | | | |
| Borrowings and interest thereon* | 54.64 | | 67.40 | | | 67.40 |
| Finance lease liability | 11.68 | | 9.47 | 3.18 | | 12.65 |
| **Current financial liabilities** | | | | | | |
| Borrowings and interest thereon* | 1181.59 | 1240.66 | | | | 1240.66 |
| Trade payables | 1975.67 | 1975.67 | | | | 1975.67 |
| Finance lease liability | 7.54 | 10.83 | | | | 10.83 |
| Maturities of long term borrowing | 38.17 | 41.22 | | | | 41.22 |
| Other financial liabilities | 621.90 | 621.90 | | | | 621.90 |

The table below provides details regarding the contractual maturities of financial liabilities including estimated interest payments as at 31st March 2017:

| Particulars | Carrying amount | upto 1 year | 1-3 years | 3-5 years | More than 5 years | Total contracted cash flows |
|---|---|---|---|---|---|---|
| **Non-current financial liabilities** | | | | | | |
| Borrowings and interest thereon* | 48.86 | | 67.40 | | | 67.40 |
| Finance lease liability | 17.95 | | 17.33 | 5.42 | | 22.75 |
| **Current financial liabilities** | | | | | | |
| Borrowings and interest thereon* | 1424.47 | 1485.16 | | | | 1485.16 |
| Trade payables | 1650.23 | 1650.23 | | | | 1650.23 |
| Finance lease liability | 8.23 | 11.63 | | | | 11.63 |
| Maturities of long term borrowing | 59.96 | 65.99 | | | | 65.99 |
| Other financial liabilities | 602.62 | 602.62 | | | | 602.62 |

*Amount included in the above maturity analysis assumes interest outflows based on the actual interest rates.

**Contractual maturities of financial assets**

The table below provides details regarding the contractual maturities of financial assets including estimated interest receipts as at 31st March 2018:

| Particulars | Carrying amount | upto 1 year | 1-3 years | 3-5 years | More than 5 years | Total contracted cash flows |
|---|---|---|---|---|---|---|
| **Non-current financial assets** | | | | | | |
| Other financial assets | 120.76 | | 53.54 | | 67.22 | 120.76 |
| **Current financial assets** | | | | | | |
| Trade receivables | 4750.60 | 4750.60 | | | | 4750.60 |
| Advance to employees | 12.78 | 12.78 | | | | 12.78 |
| Other financial assets | 41.88 | 41.88 | | | | 41.88 |

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The table below provides details regarding the contractual maturities of financial assets including estimated interest receipts as at 31st March 2017:

| Particulars | Carrying amount | upto 1 year | 1-3 years | 3-5 years | More than 5 years | Total contracted cash flows |
|---|---|---|---|---|---|---|
| **Non-current financial assets** | | | | | | |
| Other financial assets | 110.80 | | | | 110.80 | 110.80 |
| **Current financial assets** | | | | | | |
| Trade receivables | 3805.83 | 3805.83 | | | | 3805.83 |
| Advance to employees | 11.97 | 11.97 | | | | 11.97 |
| Other financial assets | 42.51 | 42.51 | | | | 42.51 |

**Maturity analysis of Derivative financial instruments**

The following table details the Group maturity analysis for its derivative financial instruments. The table has been drawn up based on the undiscounted estimated cash flows determined by reference to the projected market rates at the end of the reporting period. A positive amount represents an anticipated cash inflow and a negative amount represents an anticipated cash outflow.

| Currency | Contracts booked for | As at 31.03.2018 | | | As at 31.03.2017 | | |
|---|---|---|---|---|---|---|---|
| | | Carrying amount | Less than 1 year | 1-3 years | Carrying amount | Less than 1 year | 1-3 years |
| USD | Export receivable | 81.30 | 81.30 | - | 72.93 | 72.93 | - |
| USD | Import payment | 13.01 | 13.01 | - | 19.35 | 19.35 | - |

The note below sets out details of additional undrawn facilities that the Group has at its disposal to further reduce liquidity risk.

**Financing facilities**

| Particulars | As at 31.03.2018 | As at 31.03.2017 |
|---|---|---|
| **Unsecured term loan from bank:** | | |
| Amount used | 574.86 | 879.24 |
| Amount unused | 368.22 | 64.83 |
| | **943.08** | **944.07** |
| **Unsecured cash credit and other borrowings facility:** | | |
| Amount used | 508.95 | 454.25 |
| Amount unused | 934.53 | 924.47 |
| | **1443.48** | **1378.72** |
| **Secured Borrowings from bank:** | | |
| Amount used | 0.50 | 36.21 |
| Amount unused | - | 85.02 |
| | **0.50** | **121.23** |
| **Secured cash credit and other borrowings facility:** | | |
| Amount used | 97.78 | 90.98 |
| Amount unused | 1472.22 | 1519.02 |
| **Total** | **1570.00** | **1610.00** |
| Amount used | 1182.09 | 1460.68 |
| Amount unused | 2774.97 | 2593.34 |
| | **3957.06** | **4054.02** |

For the year ended March 31, 2018 (in Indian Rupees million, unless otherwise stated)

**Fair value measurements**

This note provides information about how the Group determines fair value of various financial assets and financial liabilities.

Fair value of the Group financial assets and financial liabilities are measured at fair value on a recurring basis.

Some of the Group financial assets and financial liabilities are measured at fair value at the end of the reporting period. The following table gives information about how the fair values of these financial assets and financial liabilities are determined (in particular, the valuation techniques and inputs used):

| Financial assets/financial liabilities | Fair Value as at | | Fair value hierarchy | Valuation techniques & key inputs used |
|---|---|---|---|---|
| | 31.03.2018 | 31.03.2017 | | |
| Investments in quoted equity instruments at FVTOCI | 144.85 | 118.22 | Level 1 | Quoted bid price in an active market **(a)** |
| Investments in quoted instruments at FVTPL | 574.30 | 3.03 | Level 1 | Quoted bid price in an active market |
| Investments in unquoted instruments at FVTPL | 0.33 | 0.30 | Level 3 | Fair valuation **(b)** |
| Investments in unquoted instruments at OCI | 11.30 | 11.30 | Level 3 | Fair valuation **(b)** |

There were no changes in the fair value hierarchy Levels in the above periods.

**(a)** These investments in equity instruments are not for trading. Instead, they are held for medium or long term strategic purpose. Upon the application of IND AS 109, the Group has chosen to designate these investments in equity instruments as at FVTOCI as the Directors believe that this provides a more meaningful presentation for medium or long term strategic investments, than reflecting changes in fair value immediately in profit or loss.

**(b)** These investment in equity are not significant in value and hence additional disclosures are not presented.

**Fair value of financial assets and financial liabilities that are not measured at fair value (but fair value disclosures are required)**

| Particulars | Fair value hierarchy | As at 31.03.2018 | | As at 31.03.2017 | |
|---|---|---|---|---|---|
| | | Carrying amount | Fair value | Carrying amount | Fair value |
| **Financial assets at amortised cost:** | | | | | |
| **Non-current financial assets** | | | | | |
| **Other financial assets** | | | | | |
| Security deposit | Level 3 | 120.76 | 115.78 | 110.80 | 95.57 |
| **Current financial assets** | | | | | |
| Trade receivable | Level 2 | 4750.60 | 4750.60 | 3805.83 | 3805.83 |
| Advances to employees | Level 3 | 12.78 | 12.78 | 11.97 | 11.97 |
| Other advances | Level 3 | 41.88 | 41.88 | 42.51 | 42.51 |
| **Financial liabilities held at amortised cost:** | | | | | |
| **Non-current financial liabilities** | | | | | |
| Borrowings and interest thereon | Level 2 | 54.64 | 54.64 | 48.86 | 44.87 |
| Finance lease and interest thereon | Level 2 | 11.68 | 11.68 | 17.95 | 17.95 |
| **Current financial liabilities** | | | | | |
| Borrowings and interest thereon | Level 2 | 1181.59 | 1181.59 | 1424.47 | 1362.22 |
| Trade payables | Level 2 | 1975.67 | 1975.67 | 1650.23 | 1650.23 |
| Finance lease and interest thereon | Level 2 | 7.54 | 7.54 | 8.23 | 8.23 |
| Current maturities of long term | Level 2 | 38.17 | 38.17 | 59.96 | 57.05 |
| Others financial liabilities | Level 3 | 621.90 | 621.90 | 602.62 | 602.92 |

The fair values of the financial assets and financial liabilities included above have been determined in accordance with generally accepted pricing models based on a discounted cash flow analysis, with the most significant inputs being the discount rate that reflects the credit risk of counterparties.

For the year ended March 31, 2018 (in Indian Rupees million, unless otherwise stated)

## 36. Related Party Disclosures

**List of related parties**

Related party relationships are as identified by the management and relied upon by the auditors.

**Joint ventures**

| | |
|---|---|
| Murugappa Morgan Thermal Ceramics Ltd. | [MMTCL] |
| Ciria India Ltd. | [Ciria] |

**Associate and its subsidiaries**

| | |
|---|---|
| Wendt (India) Ltd. | [Wendt] |
| Wendt Grinding Technologies Ltd., Thailand | [WGTL] |
| Wendt (Middle East) FZE | [WME] |

**Key Management Personnel**

Mr. K Srinivasan, Managing Director

**Other Related parties**

| | |
|---|---|
| Ambadi Investments Ltd. (Shareholder with significant influence) | [AIL] |
| Parry Enterprises India Ltd. (Subsidiary of AIL) | [PEIL] |
| Parry Agro Industries Ltd. (Subsidiary of AIL) | [PAL] |
| Carborundum Universal Employees Provident fund | [CUEPF] |

Retiral funds of Joint ventures, Associate and Other Related parties

**A. Transactions during FY 2017-18**

| Related Party | Income from Sales & Services | Dividend income | Purchase of goods | Expenditure on other services | Rental Expenses | Managerial remuneration | Purchases of Fixed asset | Contribution to Provident Fund |
|---|---|---|---|---|---|---|---|---|
| **Joint Ventures** | | | | | | | | |
| MMTCL | 25.54 | 71.54 | 8.22 | - | - | - | 0.14 | - |
| Ciria | 108.38 | 30.00 | 1.97 | - | - | - | - | - |
| **Total** | **133.92** | **101.54** | **10.19** | **-** | **-** | **-** | **0.14** | **-** |
| **Associate & its subsidiaries** | | | | | | | | |
| Wendt | 28.61 | 19.93 | 20.36 | 0.91 | 1.73 | - | 2.28 | - |
| WGTL | 56.41 | - | 4.71 | - | - | - | - | - |
| WME | 2.05 | - | - | - | - | - | - | - |
| **Total** | **87.07** | **19.93** | **25.07** | **0.91** | **1.73** | **-** | **2.28** | **-** |
| **Other related parties** | | | | | | | | |
| PEIL | - | - | - | 34.40 | - | - | - | - |
| CUEPF | - | - | - | - | - | - | - | **116.80** |
| **Total** | - | - | - | **34.40** | - | - | - | **116.80** |
| **KMP** | - | - | - | - | - | 22.46 | - | - |
| **Grand Total** | **220.99** | **121.47** | **35.26** | **35.31** | **1.73** | **22.46** | **2.42** | **116.80** |

For the year ended March 31, 2018 (in Indian Rupees million, unless otherwise stated)

**B. Transactions during FY 2016-17**

| Related Party | Income from Sales & Services | Dividend income | Reimbursement of employee cost | Purchase of goods | Expenditure on other services | Rental expenses | Managerial remuneration | Contribution to Provident Fund |
|---|---|---|---|---|---|---|---|---|
| **Joint Ventures** | | | | | | | | |
| MMTCL | 23.94 | 157.39 | - | 9.53 | - | - | - | - |
| Ciria | 148.74 | 15.00 | - | - | - | - | - | - |
| **Total** | **172.68** | **172.39** | **-** | **9.53** | **-** | **-** | **-** | **-** |
| **Associate & its subsidiaries** | | | | | | | | |
| Wendt | 27.70 | 19.93 | 0.06 | 18.66 | 2.42 | 1.54 | - | - |
| WGTL | 51.70 | - | - | - | - | - | - | - |
| WME | 2.97 | - | - | - | - | - | - | - |
| **Total** | **82.37** | **19.93** | **0.06** | **18.66** | **2.42** | **1.54** | **-** | **-** |
| **Other related parties** | | | | | | | | |
| PEIL | - | - | - | - | 39.68 | - | - | - |
| CUEPF | - | - | - | - | - | - | - | 106.26 |
| **Total** | **-** | **-** | **-** | **-** | **39.68** | **-** | **-** | **106.26** |
| **KMP** | - | - | - | - | - | - | 20.02 | - |
| **Grand Total** | **255.05** | **192.32** | **0.06** | **28.19** | **42.10** | **1.54** | **20.02** | **106.26** |

**C. Outstandings**

| Related Party | As at 31.03.2018 | | | As at 31.03.2017 | | |
|---|---|---|---|---|---|---|
| | Trade and other receivable | Deposit outstanding | Payables | Trade and other receivable | Deposit outstanding | Payables |
| **Joint Ventures** | | | | | | |
| MMTCL | 17.23 | - | 0.38 | 0.04 | - | 1.68 |
| Ciria | 32.12 | - | 0.22 | 8.90 | - | - |
| **Total** | **49.35** | **-** | **0.60** | **8.94** | **-** | **1.68** |
| **Associate & its subsidiaries** | | | | | | |
| Wendt | 26.66 | 1.00 | 1.92 | 2.39 | 1.00 | 3.79 |
| WGTL | 9.21 | - | 1.17 | 3.46 | - | - |
| WME | 1.05 | - | - | 0.96 | - | - |
| **Total** | **36.92** | **1.00** | **3.09** | **6.81** | **1.00** | **3.79** |
| **Other related parties** | | | | | | |
| PEIL | - | - | 1.61 | - | - | 1.19 |
| CUEPF | - | - | 9.88 | - | - | 9.09 |
| **Total** | **-** | **-** | **11.49** | **-** | **-** | **10.28** |
| **Grand Total** | **86.27** | **1.00** | **15.18** | **15.75** | **1.00** | **15.75** |

Transactions with related parties in the nature of sale of goods, rendering of services, purchase of goods, procurement of services are at arm's length price.

For the year ended March 31, 2018 (in Indian Rupees million, unless otherwise stated)

**Compensation to Key Management Personnel**

The remuneration to Key Management Personnel for the years is given below:

| Particulars | As at | |
|---|---|---|
| | 31.03.2018 | 31.03.2017 |
| Short term benefits | 19.39 | 17.41 |
| Post employment benefits | 3.04 | 2.58 |
| Other benefits | 0.03 | 0.03 |
| | **22.46** | **20.02** |

The Remuneration to Key Management Personnel is determined by the Nomination and Remuneration Committee having regard to the performance of individual and market trends.

## 37. Notes relating to Leases

| Particulars | As at | |
|---|---|---|
| | 31.03.2018 | 31.03.2017 |
| a. Original cost of Leased Assets | 37.40 | 40.28 |
| Cost as per Fixed Assets Schedule. - Refer Note: 4A | 31.58 | 35.33 |
| b. Net Carrying amount | 13.55 | 21.67 |
| c. Reconciliation between Total Minimum Lease payments and their Present value: | | |
| Total Minimum Lease Payments | 23.48 | 34.38 |
| Less: Future Liability on Interest account | (4.26) | (8.20) |
| Present value of Lease payments - Refer Note: 16 | 19.22 | 26.18 |

d. Year wise Future Minimum lease rental payments:

| Particulars | Total Minimum Lease Payments as on 31.03.2018 | Present value of Lease payments as on 31.03.2018 | Total Minimum Lease Payments as on 31.03.2017 | Present value of Lease payments as on 31.03.2017 |
|---|---|---|---|---|
| (i) Not later than one year | 10.83 | 7.54 | 11.63 | 8.23 |
| (ii) Later than one year and not later than three years | 9.47 | 8.71 | 17.33 | 13.28 |
| (iii) Later than three years and not later than five years | 3.18 | 2.97 | 5.42 | 4.67 |
| (iv) Later than five years | - | - | - | - |
| **Total** | **23.48** | **19.22** | **34.38** | **26.18** |

e. The Group has taken certain premises under operating leases cancellable at mutual option. Hence no disclosure in this regard has been made.

f. The subsidiary in America has entered into non-cancellable operating leases upto five years to the value of the minimum lease rentals aggregating to ₹23.15 million.

**38.** Dividend Tax on the Interim Dividend has been paid after availing the credit amounting to ₹18.15 million (Previous year: ₹22.65 million) in respect of the tax paid on the dividends received from three domestic subsidiaries . Dividend tax payable on the proposed final dividend is eligible for set off of dividend tax credit amounting to ₹13.22 million (Previous year - ₹14.05 million) in respect of dividend tax payable on dividends to be distributed by one domestic subsidiary and an overseas subsidiary based on provision under sub section (1A) of Section 115O of the Income tax Act.

For the year ended March 31, 2018 (in Indian Rupees million, unless otherwise stated)

## 39. Research and Development expenditure incurred during the year is given below:

**a) Revenue Expenditure (disclosed under respective heads of expenditure)**

| Particulars | For the year | |
|---|---|---|
| | 2017-18 | 2016-17 |
| Direct Material, Supplies and Consumables | 36.64 | 57.66 |
| Employee Benefit Expenses | 55.80 | 44.12 |
| Repair & Maintenance | 3.04 | 3.40 |
| Other Expenses | 24.35 | 18.60 |
| Depreciation | 11.93 | 10.53 |
| **Total Revenue Expenditure** | **131.76** | **134.31** |

**b) Capital Expenditure**

| Particulars | For the year | |
|---|---|---|
| | 2017-18 | 2016-17 |
| Property, plant and equipment | | |
| Buildings | 2.30 | 2.49 |
| Plant & Machinery | 24.21 | 7.11 |
| Furniture & Fixtures | 0.03 | 1.85 |
| | 26.54 | 11.45 |
| Intangibles | 0.02 | 2.29 |
| **Total** | **26.56** | **13.74** |

## 40. Disclosure relating to Specified Bank Notes (SBN)

| Particulars | SBN | Other Denomination Notes | Total |
|---|---|---|---|
| Closing Cash in hand as on 08.11.2016 | 0.99 | 0.58 | 1.57 |
| Add: Permitted Receipts | - | 3.37 | 3.37 |
| Deduct: Permitted Payments | - | 3.15 | 3.15 |
| Deduct: Amount deposited in Banks | 0.99 | - | 0.99 |
| Closing Cash in hand as on 30.12.2016 | - | 0.80 | 0.80 |

# Notes forming part of the Consolidated Financial Statements

**For the year ended March 31, 2018** (in Indian Rupees million, unless otherwise stated)

## 41. Additional information as required by Paragraph 2 of the General Instructions for Preparation of Consolidated Financial Statements to Schedule III to the Companies Act, 2013

| Name of the entity | 2017-18 | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Net assets i.e. total asset minus total liabilities | | Share in profit or loss | | Share in Other Comprehensive Income | | Share in Total Comprehensive Income | |
| | As % of Consolidated net assets | Amount (₹ million) | As % of Consolidated Profit | Amount (₹ million) | As % of Consolidated Other Comprehensive Income | Amount (₹ million) | As % of Consolidated Profit | Amount (₹ million) |
| **I. Parent** | | | | | | | | |
| Carborundum Universal Limited | 74.77% | 11696.70 | 66.55% | 1434.79 | 162.15% | 29.95 | 67.36% | 1464.74 |
| **II. Subsidiaries (including Step down subsidiaries)** | | | | | | | | |
| **a) Indian** | | | | | | | | |
| 1. Net Access India Ltd. | 0.69% | 108.26 | 1.26% | 27.27 | 2.49% | 0.46 | 1.28% | 27.73 |
| 2. Southern Energy Development Corporation Ltd. | 1.13% | 176.69 | 2.35% | 50.68 | 0.16% | 0.03 | 2.33% | 50.71 |
| 3. Sterling Abrasives Ltd. | 3.13% | 489.29 | 4.23% | 91.21 | (17.22%) | (3.18) | 4.05% | 88.03 |
| **b) Foreign** | | | | | | | | |
| 1. CUMI (Australia) Pty Ltd. | 3.81% | 596.26 | 4.95% | 106.74 | - | - | 4.91% | 106.74 |
| 2. CUMI International Ltd. | 19.89% | 3111.36 | 13.16% | 283.83 | - | - | 13.05% | 283.83 |
| 3. Volzhsky Abrasives Works | 25.40% | 3973.39 | 41.92% | 903.80 | - | - | 41.56% | 903.80 |
| 4. Foskor Zirconia (Pty) Ltd. | 0.09% | 13.39 | (7.53%) | (162.31) | 1.84% | 0.34 | (7.45%) | (161.97) |
| 5. CUMI America Inc. | 0.28% | 45.48 | (1.52%) | (32.68) | - | - | (1.50%) | (32.68) |
| 6. CUMI Middle East FZE | 0.14% | 21.69 | 0.36% | 7.95 | - | - | 0.37% | 7.95 |
| 7. CUMI Abrasives & Ceramics Company Ltd. | 0.31% | 48.82 | (0.41%) | (8.88) | - | - | (0.41%) | (8.88) |
| 8. Thukela Refractories Isithebe Pty Ltd. | 0.00% | 0.00 | (0.01%) | (0.11) | - | - | (0.01%) | (0.11) |
| 9. CUMI Europe s.r.o | 0.02% | 3.04 | (0.35%) | (7.59) | - | - | (0.35%) | (7.59) |
| Non-controlling interest in all subsidiaries | (3.93%) | (614.74) | (1.85%) | (39.92) | 5.97% | 1.10 | (1.79%) | (38.82) |
| **II. Associates (Investment as per equity method)** | | | | | | | | |
| 1. Wendt (India) Ltd. | 3.10% | 484.89 | 2.43% | 52.32 | 47.60% | 8.79 | 2.81% | 61.11 |
| **III. Joint ventures (Investment as per equity method)** | | | | | | | | |
| **Indian** | | | | | | | | |
| 1. Murugappa Morgan Thermal Ceramics Ltd. | 3.30% | 516.89 | 3.32% | 71.52 | 4.60% | 0.85 | 3.33% | 72.37 |
| 2. Ciria India Ltd. | 0.44% | 70.38 | 1.06% | 22.76 | 0.28% | 0.05 | 1.05% | 22.81 |
| Inter-company Elimination & Consolidation Adjustments | (32.57%) | (5098.29) | (29.92%) | (645.42) | (107.87%) | (19.92) | (30.59%) | (665.34) |
| **Total** | **100.00%** | **15643.50** | **100.00%** | **2155.96** | **100.00%** | **18.47** | **100.00%** | **2174.43** |

## Notes forming part of the Consolidated Financial Statements

**For the year ended March 31, 2018** (in Indian Rupees million, unless otherwise stated)

| Name of the entity | 2016-17 | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Net assets i.e. total asset minus total liabilities | | Share in profit or loss | | Share in Other Comprehensive Income | | Share in Total Comprehensive Income | |
| | As % of Consolidated net assets | Amount (₹ million) | As % of Consolidated Profit | Amount (₹ million) | As % of consolidated Other Comprehensive Income | Amount ( ₹ million) | As % of Consolidated Profit | Amount (₹ million) |
| **I. Parent** | | | | | | | | |
| Carborundum Universal Limited | 76.30% | 10550.30 | 69.64% | 1217.75 | (20.24%) | (79.50) | 53.15% | 1138.25 |
| **II. Subsidiaries (including Step down subsidiaries)** | | | | | | | | |
| **a) Indian** | | | | | | | | |
| 1. Net Access India Ltd. | 0.76% | 104.60 | 1.38% | 24.13 | (0.14%) | (0.56) | 1.10% | 23.57 |
| 2. Southern Energy Development Corporation Ltd. | 1.67% | 231.17 | 3.52% | 61.59 | (0.28%) | (1.10) | 2.82% | 60.49 |
| 3. Sterling Abrasives Ltd. | 3.10% | 428.34 | 3.78% | 66.07 | 0.38% | 1.49 | 3.15% | 67.56 |
| **b) Foreign** | | | | | | | | |
| 1. CUMI (Australia) Pty Ltd. | 4.22% | 584.22 | 5.74% | 100.34 | - | - | 4.69% | 100.34 |
| 2. CUMI International Ltd. | 20.37% | 2816.25 | 13.72% | 239.91 | - | - | 11.20% | 239.91 |
| 3. Volzhsky Abrasives Works | 25.00% | 3457.37 | 35.54% | 621.43 | - | - | 29.02% | 621.43 |
| 4. Foskor Zirconia (Pty) Ltd. | 1.23% | 170.68 | (1.35%) | (23.59) | (0.08%) | (0.33) | (1.12%) | (23.92) |
| 5. CUMI America Inc | 0.56% | 78.22 | (5.62%) | (98.31) | - | - | (4.59%) | (98.31) |
| 6. CUMI Middle East FZE | 0.13% | 18.49 | 0.27% | 4.81 | - | - | 0.22% | 4.81 |
| 7. CUMI Abrasives & Ceramics Company Ltd. | 0.38% | 52.89 | 0.03% | 0.57 | - | - | 0.03% | 0.57 |
| 8. Thukela Refractories Isithebe Pty Ltd. | - | 0.15 | (0.11%) | (2.00) | - | - | (0.09) | (2.00) |
| 9. CUMI Europe s.r.o | 0.07% | 9.12 | 0.08% | 1.38 | - | - | 0.06% | 1.38 |
| Non controlling interest in all subsidiaries | (4.75%) | (656.63) | (5.10%) | (89.13) | (0.07%) | (0.27) | (4.17%) | (89.40) |
| **II. Associates (Investment as per equity method)** | | | | | | | | |
| 1. Wendt (India) Ltd. | 3.24% | 447.77 | 2.75% | 48.05 | (0.71%) | (2.81) | 2.11% | 45.24 |
| **III. Joint ventures (Investment as per equity method)** | | | | | | | | |
| **Indian** | | | | | | | | |
| 1. Murugappa Morgan Thermal Ceramics Ltd. | 3.84% | 530.64 | 6.09% | 106.49 | (0.24%) | (0.94) | 4.93% | 105.55 |
| 2. Ciria India Ltd. | 0.60% | 83.67 | 2.08% | 36.34 | 0.00% | (0.02) | 1.70% | 36.32 |
| **Inter-company Elimination & Consolidation Adjustments** | (36.72%) | (5079.39) | (32.44%) | (567.16) | 121.38% | 476.91 | (4.21%) | (90.25) |
| **Total** | **100.00%** | **13827.86** | **100.00%** | **1748.67** | **100.00%** | **392.87** | **100.00%** | **2141.54** |

For the year ended March 31, 2018 (in Indian Rupees million, unless otherwise stated)

## 42. Events after the reporting period:

No significant event is to be reported between the closing date and that of the meeting of Board of directors.

## 43. Applicability of New/amendment on existing Indian Accounting Standards (Ind AS)

During the current year, the following new Ind AS/amendments to existing Ind AS were announced which are effective from next financial year w.e.f. 1st April 2018:

| Standards | Ind AS 115 | Ind AS 21 | Ind AS 12 | Ind AS 40 |
|---|---|---|---|---|
| Title of the new Ind AS/Amendment to existing Ind AS; | Revenue from contracts with customers | Effect of changes in Foreign exchange rate | Income taxes | Investment property |
| The nature of the impending change or changes in accounting policy; | The standard replaces Ind AS 18 Revenue and Ind AS 11 Construction contracts and related appendices.<br>A new five-step process must be applied before revenue can be recognised. | The amendment clarifies recognition of advances at the initial rate only. No subsequent reinstatement required. | The amendments clarify the accounting for deferred taxes where an asset is measured at fair value and that fair value is below the asset's tax base. | The amendments clarify that transfers to, or from, investment property can only be made if there has been a change in use that is supported by evidence. |
| The date by which application of the Ind AS is required; | Effective from 1st April 2018 | | | |
| The date as at which it plans to apply the Ind AS initially | This will be implemented from the effective date 1st April 2018 as applicable. | | | |
| Impact to the Group | No material impact foreseen | Already practised. Hence no incremental impact | No material impact foreseen | No investment property is held by the Group. |

## 44. Approval of financial statements:

The financial statements were reviewed and recommended by the Audit Committee and has been approved by the Board of Directors at their meeting held on May 04, 2018.

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(in Indian Rupees million, unless otherwise stated)

**Statement containing salient features of the Financial Statement of Subsidiaries/Associate companies/Joint ventures.**

Pursuant to first proviso to sub-section (3) of section 129 read with Companies (Accounts) Rules, 2014)

**(a) Summary financial information of Subsidiary Companies**

| Reporting currency | RUB | | Rand | | AUD | | INR | | USD | |
|---|---|---|---|---|---|---|---|---|---|---|
| Exchange rate | 1.11 | 1.11 | 5.46 | 5.46 | 50.09 | 50.09 | NA | NA | 63.93 | 63.93 |
| Particulars | Volzhsky Abrasive Works | | Foskor Zirconia Pty Ltd | | CUMI Australia Pty. Ltd | | Sterling Abrasives Limited | | CUMI International Ltd | |
| Financial year ended | 2017 | 2016 | 2017-18 | 2016-17 | 2017-18 | 2016-17 | 2017-18 | 2016-17 | 2017 | 2016 |
| Date of becoming subsidiary | 7th September 2007 | | 4th August 2008 | | 1st September 2003 | | 31st March 2003 | | 7th June 2007 | |
| 1. Share capital | 4.00 | 4.00 | 0.01 | 0.01 | 25.08 | 25.08 | 9.00 | 9.00 | 1645.39 | 1645.39 |
| 2. Reserves & Surplus | 3659.16 | 3186.87 | 13.37 | 192.58 | 464.08 | 464.08 | 480.29 | 419.34 | 1418.69 | 1179.96 |
| 3. Total Liabilities[a] | 394.85 | 417.34 | 698.51 | 594.75 | 211.01 | 212.84 | 219.90 | 227.12 | 570.40 | 937.92 |
| 4. Total Assets[b] | 4058.01 | 3608.21 | 711.89 | 787.34 | 700.17 | 702.00 | 709.19 | 655.46 | 3634.48 | 3763.27 |
| 5. Investments | 0.14 | 0.11 | - | - | - | - | - | - | 3620.15 | 3555.38 |
| 6. Turnover | 5948.77 | 5440.85 | 903.89 | 1072.34 | 920.41 | 831.00 | 816.39 | 719.66 | 353.56 | 326.28 |
| 7. Profit before Tax | 1083.29 | 882.04 | (179.58) | (22.48) | 152.95 | 142.18 | 134.28 | 101.20 | 256.18 | 216.32 |
| 8. Provision for Taxation | 269.66 | 166.23 | - | 5.37 | 45.85 | 42.65 | 43.07 | 35.13 | 17.44 | 16.31 |
| 9. Profit after Tax | 813.63 | 715.81 | (179.58) | (27.85) | 107.10 | 99.53 | 91.21 | 66.07 | 238.74 | 200.01 |
| 10. Proposed dividend[c] | 371.90 | 359.71 | - | - | 107.10 | 99.53 | 32.53 | 27.08 | - | - |
| 11. % of Shareholding | 98.07 | 98.07 | 51.00 | 51.00 | 51.22 | 51.22 | 60.00 | 60.00 | 100.00 | 100.00 |

| Reporting currency | RMB | | RAND | | INR | | INR | | USD | |
|---|---|---|---|---|---|---|---|---|---|---|
| Exchange Rate | 9.83 | 9.83 | 5.46 | 5.46 | NA | NA | NA | NA | 65.04 | 65.04 |
| Particulars | CUMI Abrasives & Ceramics Co Ltd | | Thukela Refractories Isithebe Pty. Ltd. | | Southern Energy Development Corporation Limited | | Net Access India Limited | | CUMI Middle East FZE. | |
| Financial year ended | 2017 | 2016 | 2017-18 | 2016-17 | 2017-18 | 2016-17 | 2017-18 | 2016-17 | 2017-18 | 2016-17 |
| Date of becoming subsidiary | 31st December 2009 | | 1st August 2012 | | 31st March 2003 | | 1st December 2001 | | 11th December 2005 | |
| 1. Share capital | 989.38 | 797.70 | 0.01 | 0.01 | 4.60 | 4.60 | 50.00 | 50.00 | 1.77 | 1.77 |
| 2. Reserves & Surplus | (940.93) | (914.22) | (0.01) | 0.16 | 1004.47 | 919.58 | 58.26 | 54.60 | 19.92 | 16.78 |
| 3. Total Liabilities[a] | 113.25 | 327.91 | - | 1.05 | 8.96 | 9.45 | 100.25 | 81.48 | 88.05 | 36.62 |
| 4. Total Assets[b] | 161.70 | 211.39 | - | 1.22 | 1018.03 | 933.63 | 208.51 | 186.08 | 109.74 | 55.17 |
| 5. Investments | - | - | - | - | 876.56 | 758.84 | 0.00 | 2.31 | - | - |
| 6. Turnover | 218.36 | 304.65 | 0.00 | 3.19 | 246.43 | 271.07 | 403.59 | 396.71 | 215.55 | 151.75 |
| 7. Profit before Tax | (28.10) | (104.40) | (0.12) | (2.30) | 71.19 | 89.96 | 37.18 | 35.40 | 8.02 | 4.67 |
| 8. Provision for Taxation | - | - | - | - | 20.51 | 28.37 | 9.91 | 11.27 | - | - |
| 9. Profit after Tax | (28.10) | (104.40) | (0.12) | (2.30) | 50.68 | 61.59 | 27.27 | 24.13 | 8.02 | 4.67 |
| 10. Proposed dividend[c] | - | - | - | - | 88.58 | 55.37 | 24.07 | 34.00 | 6.50 | 4.88 |
| 11. % of Shareholding | 100.00 | 100.00 | 100.00 | 100.00 | 84.76 | 84.76 | 100.00 | 100.00 | 100.00 | 100.00 |

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(in Indian Rupees million, unless otherwise stated)

| Reporting currency | USD | | CZK | |
|---|---|---|---|---|
| **Exchange Rate** | **65.04** | **65.04** | **3.00** | **3.00** |
| **Particulars** | **CUMI America Inc** | | **CUMI Europe s.r.o** | |
| **Financial year ended** | **2017-18** | **2016-17** | **2017** | **2016** |
| Date of becoming subsidiary | 4th June 1999 | | 9th December 2014 | |
| 1. Share capital | 315.44 | 315.44 | 82.80 | 82.80 |
| 2. Reserves & Surplus | (269.96) | (236.98) | (21.70) | (13.46) |
| 3. Total Liabilities[(a)] | 399.73 | 367.53 | 7.30 | 7.31 |
| 4. Total Assets[(b)] | 445.21 | 445.99 | 68.40 | 76.65 |
| 5. Investments | - | - | - | - |
| 6. Turnover | 474.26 | 388.54 | 30.60 | 37.07 |
| 7. Profit before Tax | (32.98) | (95.31) | (8.24) | (1.14) |
| 8. Provision for Taxation | - | - | - | - |
| 9. Profit after Tax | (32.98) | (95.31) | (8.24) | (1.14) |
| 10. Proposed dividend[(c)] | - | - | - | - |
| 11. % of Shareholding | 100.00 | 100.00 | 100.00 | 100.00 |

1. Names of subsidiaries which are yet to commence operations - Nil
2. Names of subsidiaries which have been liquidated or sold during the year - Nil

**Notes:**

a. Total Liabilities include: Current Liabilities, Non Current Liabilities
b. Total Assets include: Current Assets, Non Current Assets
c. Including interim dividend and dividend distribution tax as applicable. For Volzhsky Abrasive Works, Russia, dividend for 2017 is due for consideration by the shareholders in June 2018.
d. The above information has been furnished in accordance with Section 129(3) of the Companies Act 2013. The above statement is based on the financial statements of the respective subsidiary company which have been prepared in accordance with regulatory requirements as applicable in the country of incorporation. In case of foreign subsidiaries, the figures given in foreign currency have been translated into Indian Rupees based on the exchange rate as on 31.3.2018 / 31.12.2017, as applicable.
e. The conversation rates have been maintained at the same for the previous financial year for comparative purposes.
f. Investments in VAW, Foskor, CACCL China, Thukela Refractories, CUMI Middle East, CUMI America, CUMI Europe are held by CUMI International Limited.

### (b) Associates and Joint Ventures

### Statement pursuant to Section 129(3) of the Companies Act, 2013 related to Associate Companies and Joint Ventures

| S.no | Name of Associates/Joint Ventures | Wendt (India) Limited | Ciria India Limited | Murugappa Morgan Thermal Ceramics Limited |
|---|---|---|---|---|
| 1 | Latest audited Balance Sheet Date | 31.03.2018 | 31.03.2018 | 31.03.2018 |
| 2 | Date on which the Associate or Joint Venture was associated or acquired | 16th October 1990 | 26th July 2000 | 13th November 1995 |
| 3 | Shares of Associate/Joint Ventures held by the company on the year end | | | |
| | No. of shares | 797,352 | 59,998 | 1,430,793 |
| | Amount of Investment in Associates/Joint Venture ₹ In million | 10.36 | 1.68 | 44.04 |
| | Extent of Holding % | 39.87 | 30.00 | 49.00 |
| 4 | Description of how there is significant influence | Through shareholding | Through shareholding | Through shareholding |
| 5 | Reason why the associate / joint venture is not consolidated | Not applicable as the financials of this entity is consolidated in the Company's Consolidated Financials | Not applicable as the financials of this entity is consolidated in the Company's Consolidated Financials | Not applicable as the financials of this entity is consolidated in the Company's Consolidated Financials |
| 6 | Networth attributable to Shareholding as per latest audited Balance Sheet | 484.89 | 70.38 | 516.89 |
| 7 | Profit / Loss for the year | 131.24 | 75.86 | 145.94 |
| | Considered in Consolidation | 52.32 | 22.76 | 71.52 |
| | Not Considered in Consolidation | 78.92 | 53.10 | 74.42 |

On behalf of the Board

**M M Murugappan**
*Chairman*

**K Srinivasan**
*Managing Director*

Chennai
May 04, 2018

**P Padmanabhan**
*Senior Associate Vice President - Accounts and Taxation*

**Rekha Surendhiran**
*Company Secretary*

# Independent Auditors' Report

TO

## THE MEMBERS OF CARBORUNDUM UNIVERSAL LIMITED Report on the Standalone Indian Accounting Standards (Ind AS) Financial Statements

1. We have audited the accompanying standalone financial statements of Carborundum Universal Limited ("the Company"), which comprise the Balance Sheet as at March 31, 2018, the Statement of Profit and Loss (including Other Comprehensive Income), the Cash Flow Statement and the Statement of Changes in Equity for the year then ended, and a summary of the significant accounting policies and other explanatory information.

## Management's Responsibility for the Standalone Ind AS Financial Statements

2. The Company's Board of Directors is responsible for the matters stated in Section 134(5) of the Companies Act, 2013 ("the Act") with respect to the preparation of these standalone Ind AS financial statements to give a true and fair view of the financial position, financial performance (including other comprehensive income), cash flows and changes in equity of the Company in accordance with the accounting principles generally accepted in India, including the Indian Accounting Standards specified in the Companies (Indian Accounting Standards) Rules, 2015 (as amended) under Section 133 of the Act. This responsibility also includes maintenance of adequate accounting records in accordance with the provisions of the Act for safeguarding of the assets of the Company and for preventing and detecting frauds and other irregularities; selection and application of appropriate accounting policies; making judgments and estimates that are reasonable and prudent; and design, implementation and maintenance of adequate internal financial controls, that were operating effectively for ensuring the accuracy and completeness of the accounting records, relevant to the preparation and presentation of the standalone Ind AS financial statements that give a true and fair view and are free from material misstatement, whether due to fraud or error.

## Auditors' Responsibility

3. Our responsibility is to express an opinion on these standalone Ind AS financial statements based on our audit.

4. We have taken into account the provisions of the Act and the Rules made thereunder including the accounting and auditing standards and matters which are required to be included in the audit report under the provisions of the Act and the Rules made thereunder.

5. We conducted our audit of the standalone Ind AS financial statements in accordance with the Standards on Auditing specified under Section 143(10) of the Act and other applicable authoritative pronouncements issued by the Institute of Chartered Accountants of India. Those Standards and pronouncements require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the standalone Ind AS financial statements are free from material misstatement.

6. An audit involves performing procedures to obtain audit evidence about the amounts and the disclosures in the standalone Ind AS financial statements. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the standalone Ind AS financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal financial control relevant to the Company's preparation of the standalone Ind AS financial statements that give a true and fair view, in order to design audit procedures that are appropriate in the circumstances. An audit also includes evaluating the appropriateness of the accounting policies used and the reasonableness of the accounting estimates made by the Company's Directors, as well as evaluating the overall presentation of the standalone Ind AS financial statements.

7. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion on the standalone Ind AS financial statements.

## Opinion

8. In our opinion and to the best of our information and according to the explanations given to us, the aforesaid standalone Ind AS financial statements give the information required by the Act in the manner so required and give a true and fair view in conformity with the accounting principles generally accepted in India, of the state of affairs of the Company as at March 31, 2018, and its total comprehensive income (comprising of profit and other comprehensive income), its cash flows and the changes in equity for the year ended on that date.

## Other Matter

9. The standalone Ind AS financial statements of the Company for the year ended March 31, 2017, were audited by another firm of Chartered Accountants under the Companies Act, 2013 who, vide their report dated May 9, 2017, expressed an unmodified opinion on those financial statements. Our opinion is not qualified in respect of this matter.

## Report on Other Legal and Regulatory Requirements

10. As required by the Companies (Auditor's Report) Order, 2016, issued by the Central Government of India in terms of sub-section (11) of section 143 of the Act ("the Order"), and on the basis of such checks of the books and records of the Company as we considered appropriate and according to the information and explanations given to us, we give in the Annexure B a statement on the matters specified in paragraphs 3 and 4 of the Order.

11. As required by Section 143 (3) of the Act, we report that:

    a) We have sought and obtained all the information and explanations which to the best of our knowledge and belief were necessary for the purposes of our audit.

    b) In our opinion, proper books of account as required by law have been kept by the Company so far as it appears from our examination of those books.

c) The Balance Sheet, the Statement of Profit and Loss (including other comprehensive income), the Cash Flow Statement and the Statement of Changes in Equity dealt with by this Report are in agreement with the books of account.

d) In our opinion, the aforesaid standalone Ind AS financial statements comply with the Indian Accounting Standards specified under Section 133 of the Act.

e) On the basis of the written representations received from the directors as on March 31, 2018 taken on record by the Board of Directors, none of the directors is disqualified as on March 31, 2018 from being appointed as a director in terms of Section 164 (2) of the Act.

f) With respect to the adequacy of the internal financial controls with reference to financial statements of the Company and the operating effectiveness of such controls, refer to our separate Report in Annexure A.

g) With respect to the other matters to be included in the Auditors' Report in accordance with Rule 11 of the Companies (Audit and Auditors) Rules, 2014, in our opinion and to the best of our knowledge and belief and according to the information and explanations given to us:

i. The Company has disclosed the impact, if any, of pending litigations as at March 31, 2018 on its financial position in its standalone Ind AS financial statements - Refer Note 30;

ii. The Company did not have any material foreseeable losses on long-term contracts and did not have any derivative contracts as at March 31, 2018.

iii. There has been no delay in transferring amounts, required to be transferred, to the Investor Education and Protection Fund by the Company during the year ended March 31, 2018.

iv. The reporting on disclosures relating to Specified Bank Notes is not applicable to the Company for the year ended March 31, 2018.

**For Price Waterhouse Chartered Accountants LLP**
Firm Registration Number: 012754N/N500016
*Chartered Accountants*

**Subramanian Vivek**
*Partner*
Membership No. 100332

Place: Chennai
Date: May 04, 2018

## Annexure A to Independent Auditors' Report

**Referred to in paragraph 11(f) of the Independent Auditors' Report of even date to the members of Carborundum Universal Limited on the standalone financial statements as of and for the year ended March 31, 2018**

### Report on the Internal Financial Controls under Clause (i) of Sub-section 3 of Section 143 of the Act

1. We have audited the internal financial controls over financial reporting of Carborundum Universal Limited ("the Company") as of March 31, 2018 in conjunction with our audit of the standalone financial statements of the Company for the year ended on that date.

### Management's Responsibility for Internal Financial Controls

2. The Company's management is responsible for establishing and maintaining internal financial controls based on the internal control over financial reporting criteria established by the Company considering the essential components of internal control stated in the Guidance Note on Audit of Internal Financial Controls Over Financial Reporting issued by the Institute of Chartered Accountants of India (ICAI). These responsibilities include the design, implementation and maintenance of adequate internal financial controls that were operating effectively for ensuring the orderly and efficient conduct of its business, including adherence to company's policies, the safeguarding of its assets, the prevention and detection of frauds and errors, the accuracy and completeness of the accounting records, and the timely preparation of reliable financial information, as required under the Act.

### Auditors' Responsibility

3. Our responsibility is to express an opinion on the Company's internal financial controls over financial reporting based on our audit. We conducted our audit in accordance with the Guidance Note on Audit of Internal Financial Controls Over Financial Reporting (the "Guidance Note") and the Standards on Auditing deemed to be prescribed under section 143(10) of the Act to the extent applicable to an audit of internal financial controls, both applicable to an audit of internal financial controls and issued by the ICAI. Those Standards and the Guidance Note require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether adequate internal financial controls over financial reporting was established and maintained and if such controls operated effectively in all material respects.

4. Our audit involves performing procedures to obtain audit evidence about the adequacy of the internal financial controls system over financial reporting and their operating effectiveness. Our audit of internal financial controls over financial reporting included obtaining an understanding of internal financial controls over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. The procedures selected

depend on the auditor's judgement, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error.

5. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion on the Company's internal financial controls system over financial reporting.

### Meaning of Internal Financial Controls Over Financial Reporting

6. A company's internal financial control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal financial control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorisations of management and directors of the company; and (3)provide reasonable assurance regarding prevention or timely detection of unauthorised acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

### Inherent Limitations of Internal Financial Controls Over Financial Reporting

7. Because of the inherent limitations of internal financial controls over financial reporting, including the possibility of collusion or improper management override of controls, material misstatements due to error or fraud may occur and not be detected. Also, projections of any evaluation of the internal financial controls over financial reporting to future periods are subject to the risk that the internal financial control over financial reporting may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

### Opinion

8. In our opinion, the Company has, in all material respects, an adequate internal financial controls system over financial reporting and such internal financial controls over financial reporting were operating effectively as at March 31, 2018, based on the internal control over financial reporting criteria established by the Company considering the essential components of internal control stated in the Guidance Note on Audit of Internal Financial Controls Over Financial Reporting issued by the Institute of Chartered Accountants of India.

**For Price Waterhouse Chartered Accountants LLP**
Firm Registration Number: 012754N/N500016
*Chartered Accountants*

**Subramanian Vivek**
*Partner*
Membership No. 100332

Place: Chennai
Date: May 04, 2018

## Annexure B to Independent Auditors' Report

**Referred to in paragraph 10 of the Independent Auditors' Report of even date to the members of Carborundum Universal Limited on the standalone financial statements for the year ended March 31, 2018**

i. In respect of fixed assets:

   (a) The Company is maintaining proper records showing full particulars, including quantitative details and situation, of fixed assets.

   (b) The fixed assets are physically verified by the Management according to a phased programme designed to cover all the items at regular intervals which, in our opinion, is reasonable having regard to the size of the Company and the nature of its assets. Pursuant to the programme, the fixed assets have been physically verified by the Management during the year and no material discrepancies have been noticed on such verification.

(c) According to the information and explanations given to us and based on the examination of the registered title deeds provided to us, we report that the title deeds of all the immovable properties of land and buildings as disclosed in Note 4 are held in the name of the Company as at the Balance Sheet date; Immovable properties of land and buildings whose title deeds have been pledged as security for loans, guarantees, etc. are held in the name of the Company as per the Memorandum of Entry executed by the Company and confirmed by the banker as on the balance sheet date. In respect of immovable properties of land and buildings that have been taken on lease, the lease agreements are in the name of the Company where the Company is a lessee in the agreement.

ii. The physical verification of inventory, excluding stocks at third party warehouses, have been conducted at reasonable intervals by the Management during the year. In respect of inventory lying at third party warehouses, these have been confirmed by them. The discrepancies noticed on physical verification of inventory as compared to book records were not material.

iii. The Company has not granted any loans, secured or unsecured, to companies, firms, Limited Liability Partnerships or other parties covered in the register maintained under Section 189 of the Act. Therefore, the provisions of Clause 3(iii) of the said Order are not applicable to the Company.

iv. In our opinion, and according to the information and explanations given to us, the Company has complied with the provisions of Section 185 and 186 of the Companies Act, 2013 in respect of the loans and investments made, and guarantees and security provided by it.

v. The Company has not accepted any deposits from the public within the meaning of Sections 73, 74, 75 and 76 of the Act and the Rules framed there under to the extent notified.

vi. Pursuant to the rules made by the Central Government, the Company is required to maintain cost records as specified under Section 148(1) of the Act. We have broadly reviewed the same, and are of the opinion that, prima facie, the prescribed accounts and records have been made and maintained. We have not, however, made a detailed examination of the records with a view to determine whether they are accurate or complete.

vii. (a) According to the information and explanations given to us and the records of the Company examined by us, in our opinion, the Company is regular in depositing undisputed statutory dues, including provident fund, employees' state insurance, income tax, sales tax, service tax, duty of customs, duty of excise, value added tax, goods and service tax with effect from July 01, 2017, cess and other material statutory dues, as applicable, with the appropriate authorities.

(b) According to the information and explanations given to us and the records of the Company examined by us, there are no dues of duty of customs, value added tax and goods and service tax which have not been deposited on account of any dispute. The particulars of dues of income tax, sales tax, service tax and duty of excise as at March 31, 2018 which have not been deposited on account of a dispute, are as follows:

| Name of the statute | Nature of dues | Amount (₹ in Million)* | Period to which the amount relates | Forum where the dispute is pending |
|---|---|---|---|---|
| Central Excise Act, 1944 | Excise duty | 0.95 | 1986-1987 | High Court of Kerala |
| Central Excise Act, 1944 | Excise duty | 1.25 | 1993, 1996-1997 and 1998 - 2003 | The Customs, Excise & Service Tax Appellate Tribunal |
| Central Excise Act, 1944 | Excise duty | 7.69 | 1999 - 2000 and 2011- 2015 | Commissioner of Central Excise (Appeals) |
| Finance Act, 1994 | Service tax | 0.85 | 2006 - 2011 | The Customs, Excise & Service Tax Appellate Tribunal |
| The Central Sales Tax Act, 1956 | Central Sales Tax | 0.47 | 1989 - 1991 | High Court of Madras |
| Tamil Nadu General Sales Tax Act, 1959 | Sales Tax | 0.02 | 1995 - 1996 | Sales Tax Appellate Tribunal, Chennai |
| The Central Sales Tax Act, 1956 | Central Sales Tax | 0.23 | 2002 - 2003 | Sales Tax Appellate Tribunal, Chennai |
| The Central Sales Tax Act, 1956 | Central Sales Tax | 0.06 | 2004 - 2005 | Commissioner Appeals |
| Tamil Nadu General Sales Tax Act, 1959 | Sales Tax | 0.66 | 2005 - 2006 | Deputy Commissioner Appeals |
| The Central Sales Tax Act, 1956 | Central Sales Tax | 15.32 | 2005 - 2008 and 2012 -2013 | Deputy Commissioner Appeals |
| The Central Sales Tax Act, 1956 | Central Sales Tax | 1.43 | 2011 - 2012 | Commercial Tax Appellate Board, Madhya Pradesh |
| The Central Sales Tax Act, 1956 | Central Sales Tax | 2.78 | 2013-2015 | Assistant Commissioner Appeals |
| The Central Sales Tax Act, 1956 | Central Sales Tax | 9.48 | 2014 - 2015 | Additional Commissioner West Bengal - VAT |
| Income Tax Act, 1961 | Income Tax | 73.70 | 2009 - 2015 | Commissioner of Income Tax (Appeals) |

* Amount considered above is net of ₹15.26 Million paid under protest.

viii. According to the records of the Company examined by us and the information and explanations given to us, the Company has not defaulted in repayment of loans or borrowings to any financial institution or bank. The Company has not availed any loans or borrowings from Government nor has it issued any debentures.

ix. The Company has not raised any moneys by way of initial public offer, further public offer (including debt instruments) and term loans. Accordingly, the provisions of Clause 3(ix) of the Order are not applicable to the Company.

x. During the course of our examination of the books and records of the Company, carried out in accordance with the generally accepted auditing practices in India and according to the information and explanations given to us, we have neither come across any instance of material fraud by the Company or on the Company by its officers or employees, noticed or reported during the year, nor have we been informed of any such case by the Management.

xi. The Company has paid/ provided for managerial remuneration in accordance with the requisite approvals mandated by the provisions of Section 197 read with Schedule V to the Act.

xii. As the Company is not a Nidhi Company and the Nidhi Rules, 2014 are not applicable to it, the provisions of Clause 3(xii) of the Order are not applicable to the Company.

xiii. In our opinion and according to the information and explanations given to us the Company is in compliance with Section 177 and 188 of the Companies Act 2013, where applicable, for all transactions with the related parties and the details of related party transactions have been disclosed in the financial statements as required under Indian Accounting Standards (Ind AS) 24 Related Party Disclosure specified under Section 133 of the Act.

xiv. The Company has not made any preferential allotment or private placement of shares or fully or partly convertible debentures during the year under review. Accordingly, the provisions of Clause 3(xiv) of the Order are not applicable to the Company.

xv. The Company has not entered into any non-cash transactions with its directors or persons connected with him. Accordingly, the provisions of Clause 3(xv) of the Order are not applicable to the Company.

xvi. The Company is not required to be registered under Section 45-IA of the Reserve Bank of India Act, 1934. Accordingly, the provisions of Clause 3(xvi) of the Order are not applicable to the Company.

**For Price Waterhouse Chartered Accountants LLP**
Firm Registration Number: 012754N/N500016
*Chartered Accountants*

**Subramanian Vivek**
*Partner*
Membership No. 100332

Place: Chennai
Date: May 04, 2018

# Balance Sheet
(in Indian Rupees million, unless otherwise stated)

| Particulars | Notes | As at 31.03.2018 | As at 31.03.2017 |
|---|---|---|---|
| **ASSETS** | | | |
| **Non-current assets** | | | |
| (a) Property, plant and equipment | 4A | 4255.96 | 4004.01 |
| (b) Capital work-in-progress | 4B | 169.63 | 514.09 |
| (c) Intangible assets | 5A | 48.45 | 76.90 |
| (d) Intangible assets under development | 5B | 0.29 | 0.33 |
| (e) Financial assets | | | |
| (i) Investments | | | |
| (a) Investment in associate | 6A | 10.36 | 10.36 |
| (b) Investment in joint ventures | 6B | 45.72 | 45.72 |
| (c) Investment in subsidiaries | 6C | 2352.35 | 2352.35 |
| (d) Other investments | 6D | 160.14 | 132.73 |
| (ii) Other financial assets | 7A | 109.54 | 99.87 |
| (f) Other non-current assets | 8A | 164.24 | 229.13 |
| **Total Non-Current assets** | | **7316.68** | **7465.49** |
| **Current assets** | | | |
| (a) Inventories | 9 | 2603.98 | 2267.72 |
| (b) Financial assets | | | |
| (i) Other investments | 6E | 544.79 | - |
| (ii) Trade receivables | 10 | 3267.44 | 2562.84 |
| (iii) Cash and cash equivalents | 11A | 195.67 | 67.05 |
| (iv) Bank balances other than (iii) above | 11B | 12.76 | 12.21 |
| (v) Other financial assets | 7B | 46.95 | 43.60 |
| (c) Other current assets | 8B | 370.33 | 554.25 |
| **Total Current assets** | | **7041.92** | **5507.67** |
| **Total Assets** | | **14358.60** | **12973.16** |
| **EQUITY AND LIABILITIES** | | | |
| **EQUITY** | | | |
| (a) Equity share capital | 12 | 188.96 | 188.66 |
| (b) Other equity | 13 | 11507.74 | 10361.64 |
| **Total Equity** | | **11696.70** | **10550.30** |
| **LIABILITIES** | | | |
| **Non-Current liabilities** | | | |
| (a) Financial liabilities | | | |
| Borrowings | 14 | 10.78 | 17.94 |
| (b) Provisions | 15A | 56.95 | 43.84 |
| (c) Deferred tax liabilities (net) | 16 | 260.79 | 340.65 |
| **Total Non-Current liabilities** | | **328.52** | **402.43** |
| **Current liabilities** | | | |
| (a) Financial liabilities | | | |
| (i) Trade payables | 17 | 1668.66 | 1339.36 |
| (ii) Other financial liabilities | 18 | 564.23 | 525.04 |
| (b) Provisions | 15B | 39.10 | 39.46 |
| (c) Other current liabilities | 19 | 61.39 | 116.57 |
| **Total Current liabilities** | | **2333.38** | **2020.43** |
| **Total Liabilities** | | **2661.90** | **2422.86** |
| **Total Equity and Liabilities** | | **14358.60** | **12973.16** |
| See accompanying notes forming part of the financial statements | | | |

In terms of our report attached

On behalf of the Board

For **Price Waterhouse Chartered Accountants LLP**
Firm Registration Number: 012754N/N500016
*Chartered Accountants*

**M M Murugappan**
*Chairman*

**K Srinivasan**
*Managing Director*

**Subramanian Vivek**
*Partner*
Membership Number: 100332
Chennai
May 04, 2018

**P Padmanabhan**
*Senior Associate Vice President - Accounts and Taxation*

**Rekha Surendhiran**
*Company Secretary*

## Statement of Profit and Loss

(in Indian Rupees million, unless otherwise stated)

| Sl. No. | Particulars | Notes | For the year | |
|---|---|---|---|---|
| | | | 2017-18 | 2016-17 |
| I | Revenue from Operations | 20 | 16022.82 | 15197.77 |
| II | Other income | 21 | 310.37 | 343.25 |
| III | **Total Income (I+II)** | | **16333.19** | **15541.02** |
| IV | **Expenses** | | | |
| | Cost of material consumed | | 5796.17 | 5120.71 |
| | Purchases of stock-in-trade | | 709.25 | 818.13 |
| | Changes in inventories of finished goods, stock-in-trade and work-in-progress | 22 | 137.76 | 11.96 |
| | Excise duty on sale of goods | | 260.49 | 1140.86 |
| | Employee benefits expense | 23 | 1741.96 | 1532.71 |
| | Finance costs | 24 | 14.67 | 87.60 |
| | Depreciation and amortisation expense | 25 | 738.88 | 669.36 |
| | Other expenses | 26 | 4882.08 | 4452.61 |
| | **Total expenses (IV)** | | **14281.26** | **13833.94** |
| V | **Profit before tax (III-IV)** | | **2051.93** | **1707.08** |
| VI | **Tax expense** | | | |
| | (1) Current tax | 27A | **697.00** | **527.50** |
| | (2) Deferred tax | 16 | **(79.86)** | **(38.17)** |
| | **Total tax [VI]** | | **617.14** | **489.33** |
| VII | **Profit for the year (V - VI)** | | **1434.79** | **1217.75** |
| VIII | **Other Comprehensive Income [OCI]** | | | |
| A | (i) Items that will not be reclassified to profit or loss | | | |
| | (a) Remeasurement of the defined benefit plans | | 3.32 | (25.34) |
| | (b) Equity instruments through OCI | | 26.63 | (54.16) |
| | (ii) Income tax relating to items that will not be reclassified to profit or loss | 27B | - | - |
| | **Total Other Comprehensive Income (VIII)** | | **29.95** | **(79.50)** |
| IX | **Total Comprehensive Income for the year (VII + VIII)** | | **1464.74** | **1138.25** |
| X | **Earnings per equity share (of ₹1 each) on profit for the year (VII)** | 28 | | |
| | - Basic | | 7.60 | 6.46 |
| | - Diluted | | 7.58 | 6.44 |
| | See accompanying notes forming part of the financial statements | | | |

In terms of our report attached

For **Price Waterhouse Chartered Accountants LLP**
Firm Registration Number: 012754N/N500016
*Chartered Accountants*

**Subramanian Vivek**
*Partner*
Membership Number: 100332
Chennai
May 04, 2018

On behalf of the Board

**M M Murugappan**
*Chairman*

**K Srinivasan**
*Managing Director*

**P Padmanabhan**
*Senior Associate Vice President - Accounts and Taxation*

**Rekha Surendhiran**
*Company Secretary*

## Statement of changes in equity
(in Indian Rupees million, unless otherwise stated)

### A. Equity share capital - Refer Note: 12

| | |
|---|---|
| **Balance as at March 31, 2016** | **188.38** |
| Changes in equity share capital during the year | |
| Shares issued against Employee Stock Options Scheme/Plan | 0.28 |
| **Balance as at March 31,2017** | **188.66** |
| Changes in equity share capital during the year | |
| Shares issued against Employee Stock Options Scheme/Plan | 0.30 |
| **Balance as at March 31,2018** | **188.96** |

### B. Statement of changes in other equity

| Particulars | Reserves and Surplus - Refer Note: 13A | | | | | | Items of Other Comprehensive Income - Refer Note: 13B | | Share application money pending allotment - Refer Note: 13C | Total |
|---|---|---|---|---|---|---|---|---|---|---|
| | Profit on Forfeiture of Shares / Warrants | Capital redemption reserve | Securities premium | General Reserve | Share options outstanding account | Retained Earnings | Reserve for equity instruments | Revaluation surplus | | |
| | (a) | (b) | (c) | (d) | (e) | (f) | (g) | (h) | (i) | |
| **Balance at the beginning of the year - March 31, 2016** | **6.03** | **27.68** | **166.61** | **5675.43** | **11.77** | **3372.71** | **111.95** | **23.74** | | **9395.92** |
| Profit for the year | | | | | | 1217.75 | | | | 1217.75 |
| Other Comprehensive income for the year | | | | | | (25.34) | (54.16) | | | (79.50) |
| **Total Comprehensive income for the year** | **-** | **-** | **-** | **-** | **-** | **1192.41** | **(54.16)** | **-** | | **1138.25** |
| Share premium received on allotment of equity shares under ESOP | | | 27.54 | | | - | | | | 27.54 |
| Recognition of share-based payments | | | | | 4.31 | | | | | 4.31 |
| Interim dividend paid during the year | | | | | | (188.63) | | | | (188.63) |
| Dividend tax on Interim dividend paid during the year | | | | | | (15.75) | | | | (15.75) |
| Transfer to General Reserve | | | | 500.00 | | (500.00) | | | | - |
| **Balance at the end of the year - March 31, 2017** | **6.03** | **27.68** | **194.15** | **6175.43** | **16.08** | **3860.74** | **57.79** | **23.74** | | **10361.64** |
| Profit for the year | | | | | | 1434.79 | | | | 1434.79 |
| Other Comprehensive income for the year | | | | | | 3.32 | 26.63 | | | 29.95 |
| **Total Comprehensive income for the year** | **-** | **-** | **-** | **-** | **-** | **1438.11** | **26.63** | **-** | | **1464.74** |
| Share premium received on allotment of equity shares under ESOP | | | 32.04 | | | | | | | 32.04 |
| Share application money pending for allotment | | | | | | | | | 0.23 | 0.23 |
| Recognition of share-based payments | | | | | 14.76 | | | | | 14.76 |
| Final dividend paid during the year | | | | | | (141.51) | | | | (141.51) |
| Dividend tax on Final dividend | | | | | | (14.92) | | | | (14.92) |
| Interim dividend paid during the year | | | | | | (188.93) | | | | (188.93) |
| Dividend tax on Interim dividend paid during the year | | | | | | (20.31) | | | | (20.31) |
| Transfer to General Reserve | | | | 500.00 | | (500.00) | | | | - |
| **Balance at the end of the year - March 31, 2018** | **6.03** | **27.68** | **226.19** | **6675.43** | **30.84** | **4433.18** | **84.42** | **23.74** | **0.23** | **11507.74** |

See accompanying notes forming part of the financial statements

In terms of our report attached

For **Price Waterhouse Chartered Accountants LLP**
Firm Registration Number: 012754N/N500016
*Chartered Accountants*

**Subramanian Vivek**
*Partner*
Membership Number: 100332
Chennai
May 04, 2018

On behalf of the Board

**M M Murugappan**
*Chairman*

**K Srinivasan**
*Managing Director*

**P Padmanabhan**
*Senior Associate Vice President - Accounts and Taxation*

**Rekha Surendhiran**
*Company Secretary*

## Cash flow Statement

(in Indian Rupees million, unless otherwise stated)

| Particulars | For the year | | | |
|---|---|---|---|---|
| | 2017-18 | | 2016-17 | |
| **A. Cash flow from operating activities** | | | | |
| **Profit before Tax** | | **2051.93** | | **1707.08** |
| **Adjustment for:** | | | | |
| Depreciation and amortization expenses | 738.88 | | 669.36 | |
| Fair valuation of investments | (0.78) | | (0.75) | |
| Finance Costs | 14.67 | | 87.60 | |
| Interest income | (4.99) | | (5.40) | |
| Dividend income | (285.34) | | (321.25) | |
| Expenses recognised in respect of equity-settled share-based payments | 14.76 | | 4.31 | |
| Allowance for doubtful receivable and advances | 31.21 | | 18.22 | |
| Reversal of allowance for doubtful receivables and advances | (10.41) | | (9.65) | |
| Provision for expenses no longer required written back | (2.94) | | (3.73) | |
| Loss on sale of assets (net) | 3.17 | | 3.12 | |
| Unrealised exchange gain/(loss)-net | (17.72) | 480.51 | 5.62 | 447.45 |
| **Operating profit before working capital changes** | | **2532.44** | | **2154.53** |
| **Movement in working capital** | | | | |
| (Increase)/decrease in trade receivables | (698.43) | | (52.47) | |
| (Increase)/decrease in inventories | (336.26) | | (15.35) | |
| (Increase)/decrease in other financial assets | (13.91) | | (7.21) | |
| (Increase)/decrease in other assets | 170.02 | | (165.85) | |
| Increase/(decrease) in trade payables | 327.21 | | 313.32 | |
| Increase/(decrease) in provision and other current liabilities | (42.42) | | 30.90 | |
| Increase/(decrease) in other financial liabilities | 62.39 | (531.40) | 25.83 | 129.17 |
| **Cash generated from Operations** | | **2001.04** | | **2283.70** |
| Income tax paid | | (685.00) | | (515.00) |
| **Net cash generated by Operating activities [A]** | | **1316.04** | | **1768.70** |
| **B. Cash flow from investing activities** | | | | |
| Payments to acquire property, plant and equipment | (578.45) | | (742.94) | |
| Payments for intangible assets | (5.37) | | (8.70) | |
| Proceeds form sale of property, plant and equipment | 6.53 | | 2.05 | |
| Investment made in subsidiaries | - | | (34.00) | |
| Interest income received | 4.98 | | 5.39 | |
| Dividend income received | 285.34 | | 321.25 | |
| **Net cash (used in) investing activities [B]** | | **(286.97)** | | **(456.95)** |
| **C. Cash flow from financing activities** | | | | |
| Proceeds from issue of equity shares | 32.34 | | 27.82 | |
| Share application money pending allotment | 0.23 | | - | |
| (Repayment) of long-term borrowings - net | (7.89) | | (739.32) | |
| (Repayment) of short-term borrowings - net | - | | (325.65) | |
| Finance costs paid | (14.67) | | (87.60) | |
| Dividends paid | (330.44) | | (188.63) | |
| Tax on dividend | (35.23) | | (15.75) | |
| **Net cash (used in) financing activities [C]** | | **(355.66)** | | **(1329.13)** |
| **Net increase/(decrease) in cash and cash equivalents(A+B+C) [D]** | | **673.41** | | **(17.38)** |
| Add: Cash and Cash equivalents at the beginning of the year | | 67.05 | | 84.43 |
| **Cash and Cash equivalents at the end of the year** | | **740.46** | | **67.05** |
| | | | | |
| **Reconciliation of Cash and cash equivalents with the Balance Sheet:** | | | | |
| **Cash and Cash equivalents at the beginning of the year** | | | | |
| Cash and cash equivalents - Refer Note: 11A | | 67.05 | | 84.43 |
| | | | | |
| **Cash and cash equivalents at the end of the year** | | | | |
| Cash and cash equivalents - Refer Note: 11A | | 195.67 | | 67.05 |
| Current investment considered as Cash and Cash equivalents - Refer Note: 6E | | 544.79 | | - |
| | | **740.46** | | **67.05** |
| See accompanying notes forming part of the financial statements | | | | |

In terms of our report attached

For **Price Waterhouse Chartered Accountants LLP**
Firm Registration Number: 012754N/N500016
*Chartered Accountants*

**Subramanian Vivek**
*Partner*, Membership Number: 100332
Chennai
May 04, 2018

On behalf of the Board

**M M Murugappan**
*Chairman*

**K Srinivasan**
*Managing Director*

**P Padmanabhan**
*Senior Associate Vice President - Accounts and Taxation*

**Rekha Surendhiran**
*Company Secretary*

**Statement showing the applicable Key Accounting Standards (Ind AS) with related Policy & Notes references as per Standalone financial statements.**

| Ind AS No. | Description | Accounting policy Reference | Note Reference |
|---|---|---|---|
| 2 | Inventories | 3.16 | 9 |
| 7 | Statement of Cash flow | 3.15 | 11 |
| 8 | Accounting Policies, Changes in Accounting Estimates and Errors | | 47 |
| 10 | Event after the reporting period | | 46,48 |
| 12 | Income tax | 3.10 | 27,16 |
| 16 | Property, plant and equipment | 3.11 | 4,25 |
| 17 | Leases | 3.23 | 4,42 |
| 18 | Revenue | 3.4 | 20 |
| 19 | Employee benefits | 3.8 | 23,33 |
| 24 | Related party disclosure | | 35 |
| 28 | Investments in associates and joint ventures | | 6A,6B |
| 33 | Earning per share | 3.24 | 28 |
| 36 | Impairment of assets | 3.13 | 4,5 |
| 37 | Provisions, Contingent liabilities and assets | 3.17,3.18 | 15,30 |
| 38 | Intangible assets | 3.12 | 5,25 |
| 102 | Share based payments | 3.9 | 23,36 |
| 103 | Business combinations | 3.12.3 | |
| 105 | Non current held for sale and discontinued operations | 3.3 | |
| 107 | Financial instruments - Disclosures | 3.19,3.26,3.27 | 10,14,17,21,34 |
| 108 | Operating segments | 3.22 | 29 |
| 113 | Fair value measurements | | 34 |

# Notes forming part of the Standalone Financial Statements

For the year ended March 31, 2018

## 1. General information

Carborundum Universal Limited (CUMI) was incorporated in India as a Public Limited Company in 1954 and the shares of the Company are listed in National Stock Exchange of India Ltd. and BSE Ltd. The addresses of its registered office and place of business are disclosed in the annual report.

CUMI manufactures and sells mainly Abrasives, Ceramics (Industrial Ceramics, Refractories) and Electrominerals. (Refer Note: 29).

## 2. Application of Indian Accounting Standards (Ind AS):

The financial statements comply in all material aspects with Indian Accounting Standards (Ind AS) notified under Section 133 of the Companies Act, 2013 (the Act) [Companies (Indian Accounting Standards) Rules, 2015] and other relevant provisions of the Act.

## 3. Significant accounting policies:

### 3.1. Basis of preparation and presentation

The financial statements have been prepared on the historical cost basis except for certain financial instruments that are measured at fair values at the end of each reporting period, as explained in the accounting policies below:

Historical cost is generally based on the fair value of the consideration given in exchange for goods and services.

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The fair value measurement is based on the presumption that the transaction to sell the asset or transfer the liability takes place either:

- In the principal market for the asset or liability, or
- In the absence of a principal market, in the most advantageous market for the asset or liability.

The principal or the most advantageous market must be accessible by the Company.

The fair value of an asset or a liability is measured using the assumptions that market participants would use when pricing the asset or liability, assuming that market participants act in their best economic interest.

A fair value measurement of a non-financial asset takes into account a market participant's ability to generate economic benefits by using the asset in its highest and best use or by selling it to another market participant that would use the asset in its highest and best use.

The Company uses valuation techniques that are appropriate in the circumstances and for which sufficient data are available to measure fair value, maximising the use of relevant observable inputs and minimising the use of unobservable inputs.

All assets and liabilities for which fair value is measured or disclosed in the financial statements are categorised within the fair value hierarchy, described as follows, based on the lowest level input that is significant to the fair value measurement as a whole:

- Level 1 - Quoted (unadjusted) market prices in active markets for identical assets or liabilities.
- Level 2 - Valuation techniques for which the lowest level input that is significant to the fair value measurement is directly or indirectly observable.
- Level 3 - Valuation techniques for which the lowest level input that is significant to the fair value measurement is unobservable.

For assets and liabilities that are recognised in the financial statements on a recurring basis, the Company determines whether transfers have occurred between levels in the hierarchy by re-assessing categorisation (based on the lowest level input that is significant to the fair value measurement as a whole) at the end of each reporting period.

### 3.2 Use of estimates and judgements

In preparing these financial statements, management has made judgments, estimates and assumptions that affect the application of accounting policies and the reported amounts of assets, liabilities, income and expenses. Actual results may differ from these estimates.

**3.2.1 Estimates** and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised prospectively.

**3.2.2 Judgements** are made in applying accounting policies that have the most significant effects on the amounts recognised in the financial statements.

**3.2.3 Assumptions** and estimation uncertainties that have a significant risk of resulting in a material adjustment are reviewed on an ongoing basis.

The areas involving critical estimates or judgements are:

| S.No | Particulars | Notes |
|---|---|---|
| I | Estimation of useful life of tangible and intangible asset | 3.11 & 3.12 |
| II | Estimation of fair value of unlisted securities | 6D |
| III | Impairment of Trade receivables: Expected credit loss | 10 |
| IV | Recognition and measurement of provisions and contingencies; key assumptions about the likelihood and magnitude of an outflow of resources. | 15 & 30 |
| V | Measurement of defined benefit obligation: Key actuarial assumptions. | 33 |

### 3.3 Non-current assets held for sale

Non-current assets and disposals groups are classified as held for sale if their carrying amount will be recovered principally through a sale transaction rather than through continuing use. This condition is regarded as met only when the asset (or disposal) is available for immediate sale in its present condition subject only to terms that are usual and customary for sale of such assets and its sales is highly probable.

Non-current assets classified as held for sale are measured at the lower of their carrying amount and fair value less costs to sell.

### 3.4 Revenue recognition

Revenue is recognised to the extent that it is probable that the economic benefits will flow to the Company and the revenue can be reliably measured, regardless of when the payment is being made. Revenue is measured at the fair value of the consideration received or receivable, taking into account contractually defined terms of payment and excluding taxes or duties collected on behalf of the government. Revenue is reduced for estimated customer returns, rebates and other similar allowances.

Based on the Educational Material on Ind AS 18 issued by the ICAI, the Company has assumed that recovery of excise duty flows to the Company on its own account. This is for the reason that it is a liability of the manufacturer which forms part of the cost of production, irrespective of whether the goods are sold or not. Since the recovery of excise duty flows to the Company on its own account, revenue is recorded inclusive of excise duty.

However, Goods and Service Tax (GST)/Sales Tax/Value Added Tax (VAT) is not received by the Company on its own account. Rather, it is tax collected on value added to the commodity by the seller on behalf of the government. Accordingly, it is excluded from revenue.

The specific recognition criteria described below must also be met before revenue is recognised.

#### 3.4.1 Sale of goods

Revenue from the sale of goods is recognised when the goods are delivered and titles have passed, which generally coincides with dispatch of products to customers in case of domestic sales and on the basis of bill of lading in the case of export sales, at which time all the following conditions are satisfied:

- the Company has transferred to the buyer the significant risks and rewards of ownership of the goods;
- the Company retains neither continuing managerial involvement to the degree usually associated with ownership nor effective control over the goods sold;
- the amount of revenue can be measured reliably;
- it is probable that the economic benefits associated with the transaction will flow to the Company; and
- the costs incurred or to be incurred in respect of the transaction can be measured reliably.

#### 3.4.2 Rendering of services

The revenue from divisible contracts are recognised on the percentage completion method in respect of service contracts and in respect of supplies on dispatch. In respect of indivisible contracts, the revenues are recognised on a percentage completion method, synchronized to the billing schedules agreed by the customers.

#### 3.4.3 Other income

**Royalty income** is recognised on an accrual basis in accordance with the substance of the relevant agreement.

**Dividend income** from investments is recognised when the shareholder's right to receive payment has been established.

**Interest income** from a financial asset is recognised and accrued using effective interest rate method.

**Rental income** is recognised on a straight line basis in accordance with the agreement.

### 3.5 Foreign Currencies

Foreign currency transactions are recorded at the rates of exchange prevailing on the date of the transactions. Monetary assets and liabilities outstanding at the year-end are translated at the rate of exchange prevailing at the year-end and the gain or loss, is recognised in the Statement of Profit and Loss.

Foreign currency monetary items (other than derivative contracts) of the Company, outstanding at the Balance Sheet date are restated at the year-end rates. Non-monetary items of the Company are carried at historical cost.

Exchange differences arising on settlement / restatement of short-term foreign currency monetary assets and liabilities of the Company are recognised as income or expense in the Statement of Profit and Loss.

Refer Notes: 3.26 and 3.27 for accounting for forward exchange contracts relating to firm commitments and highly probable forecast transactions.

### 3.6 Borrowing costs

The borrowing costs (other than those attributable to fixed assets - Refer Note: 4 & 5) are recognised in profit or loss in the period in which they are incurred.

Interest income earned on temporary investment of specific borrowings pending their expenditure on qualifying assets is deducted from the borrowing costs eligible for capitalisation.

### 3.7 Government grants

Government grants are not recognised until there is reasonable assurance that the Company will comply with the conditions attaching to them and that the grants will be received.

Government grants are recognised in profit or loss on a systematic basis over the periods in which the Company recognises as expenses the related cost for which the grants are intended to compensate. Specifically, government grants whose primary condition is that the Company should purchase, construct or otherwise acquire non-current assets are recognised as deferred revenue in the Balance Sheet and transferred to profit or loss on a systematic and rational basis over the useful lives of the related assets.

Government grants that are receivable as compensation for expenses or losses already incurred or for the purpose of giving immediate financial support to the Company with no future related costs are recognised in profit or loss in the period in which they become receivable.

The benefit of a government loan at a below market rate of interest is treated as a government grant, measured as the differences between proceeds received and the fair value of the loan based on prevailing market interest rate.

Export Benefits on account of entitlement to import goods free of duty under 'Exports Benefits Scheme' are accounted based on eligibility and when there is no uncertainty in receiving the same.

### 3.8 Employee benefits

#### 3.8.1. Retirement benefit costs and termination benefits

Payments to defined contribution retirement benefit plans are recognised as an expense when employees have rendered service entitling them to the contributions.

For defined benefit retirement plans, the cost of providing benefits is determined using the projected unit credit method, with actuarial valuations being carried out at the end of each annual reporting period. Remeasurement, comprising actuarial gain and loss, the effect of the changes to asset ceiling (if applicable) and the return on plan assets (excluding net interest), is reflected immediately in the Balance Sheet with a charge or credit recognised in other comprehensive income in the period in which they occur. Remeasurement recognised in other comprehensive income is reflected in retained earnings and is not reclassified to profit or loss. Past service cost is recognised in profit or loss in the period of plan amendment. Net interest is calculated by applying the rate at the beginning of the period to the net defined benefit liability or asset.

Defined benefit costs are categorised as follows:

- service cost (including current service cost, past service cost, as well as gains and losses on curtailments and settlements);
- net interest expense or income;
- remeasurement.

The Company presents the first two components of defined benefit costs in profit or loss in the line item 'Employee benefit expense'. Curtailment gain and loss are accounted for as past service costs.

A liability for a termination benefit is recognised when the entity can no longer withdraw the offer of the termination benefit as per the relevant scheme.

The employees and the Company make monthly fixed contributions to the Carborundum Universal Limited Employee's Provident Fund Trust, equal to a specified percentage of the covered employee's salary. The interest rate payable by the Trust to the beneficiaries is being notified by the Government every year. The Company obtains an independent actuarial valuation of the Interest Guarantees as at the Balance Sheet date and provides for the shortfall, if any, in the present value of obligation of interest over the fair value of the surplus in the Fund.

#### 3.8.2 Short-term and other long-term employee benefits

A liability is recognised for benefits accruing to employees in respect of wages and salaries, annual leave and sick leave in the period the related service is rendered.

Liabilities recognised in respect of short-term employee benefits are measured at the undiscounted amount of the benefits expected to be paid in exchange for the related service.

Liabilities recognised in respect of other long-term employee benefits are measured at the present value of the estimated future cash outflows expected to be made by the Company in respect of services provided by employees up to the reporting date.

#### 3.8.3 Voluntary retirement compensation

Compensation to employees who have retired under voluntary retirement scheme is charged off to revenue.

### 3.9 Share-based payment arrangements

Equity-settled share-based payments to employees and others providing similar services are measured at the fair value of the equity instruments at the grant date. Details regarding the determination of the fair value of equity settled share based transactions are set out in Note: 36.

The fair value determined at the grant date of the equity-settled-based payments is expensed on a straight-line basis over the vesting period, based on the Company's estimate of equity instruments that will eventually vest, with a corresponding increase in equity. At the end of each reporting period, the Company revises its estimate of the number of equity instruments expected to vest. The impact of the revision of the original estimates, if any, is recognised in profit or loss such that the cumulative expense reflect the revised estimate, with a corresponding adjustment to the Share options outstanding account.

### 3.10 Taxation

Income tax expense represents the sum of the tax currently payable and deferred tax.

#### 3.10.1 Current tax

The tax currently payable is based on taxable profits for the year. Taxable profit differs from 'Profit before tax' as reported in the Statement of Profit and Loss because of items of income or expense that are taxable or deductible in other years (Temporary differences) and items that are never taxable or deductible (Permanent differences). The Company's current tax is calculated using tax rates that have been enacted by the end of the reporting period.

Current income tax assets and liabilities are measured at the amount expected to be recovered from or paid to the taxation authorities.

Current income tax relating to items recognised outside profit or loss is either in other comprehensive income or in equity. Current tax items are recognised in correlation to the underlying transaction either in OCI or directly in equity. Management periodically evaluates positions taken in the tax returns with respect to situations in which applicable tax regulations are subject to interpretation and establishes provisions where appropriate.

### 3.10.2 Deferred tax

Deferred tax is recognised on temporary differences between the carrying amounts of assets and liabilities in the financial statements and the corresponding tax bases used in computation of taxable profit. Deferred tax liabilities are generally recognised for all taxable temporary differences.

Deferred tax assets are generally recognised for all deductible temporary differences to the extent that it is probable that taxable profit will be available against which those deductible temporary differences can be utilised. Such deferred tax assets and liabilities are not recognised if the temporary differences arises from the initial recognition (other than in a business combination) of assets and liabilities in a transaction that affects neither the taxable profit nor the accounting profit. In addition deferred tax liabilities are not recognised if the temporary difference arises from the initial recognition of goodwill.

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply in the year when the asset is realised or the liability is settled, based on tax rates and tax laws that have been enacted or substantively enacted at the reporting date.

Deferred tax relating to items recognised outside profit or loss is recognised either in other comprehensive income or in equity. Deferred tax items are recognised in correlation to the underlying transaction either in OCI or directly in equity.

### 3.10.3 Indirect taxes

GST/CENVAT/VAT credit on materials purchased/services availed for production/Input services are taken into account at the time of purchase. Service tax input credit is accounted for in the books in the period in which the underlying service received is accounted and when there is no uncertainty in availing/utilising the credits. GST/CENVAT/VAT credit on purchase of capital items wherever applicable are taken into account as and when the assets are acquired. The GST/CENVAT credits so taken are utilised for payment of GST on supply and service/excise duty on goods manufactured or for payment of service tax on services rendered. The unutilised GST/CENVAT/VAT credit is carried forward in the books.

## 3.11 Property, plant and equipment

Land and buildings held for use in the production or supply of goods or services, or for administrative purposes, are stated in the Balance Sheet at cost less accumulated depreciation and accumulated impairment losses. Freehold land is not depreciated.

Fixtures and equipment are stated at cost less accumulated depreciation and accumulated impairment losses.

Depreciation is recognised so as to write off the cost of the assets (other than freehold land) less their residual values over their useful lives as specified under Schedule II, using the straight-line method. The estimated useful lives, residual value and depreciation method are reviewed at the end of each reporting period, with the effect of any changes in estimate accounted for on a prospective basis.

Assets held under finance lease are depreciated over their expected useful lives on the same basis as owned assets. However, when there is no reasonable certainty that ownership will be obtained by the end of the lease term, assets are depreciated over the shorter of the lease term and their useful lives.

Building on lease hold land are depreciated over the lease period if it is lower than the useful life mentioned in Schedule II.

Individual assets costing less than ₹5,000 are depreciated in full in the year of acquisition.

An item of property, plant and equipment is derecognised upon disposal or when no future economic benefits are expected to arise from the continued use of the asset. Any gain or loss arising on the disposal or retirement of an item of property, plant and equipment is determined as the difference between the sale proceeds and the carrying amount of the asset and is recognised in profit or loss.

When significant parts of plant and equipment are required to be replaced at regular intervals, the Company depreciates them separately based on their specific useful lives. Likewise, when a major inspection is performed, its cost is recognised in the carrying amount of the plant and equipment as a replacement if the recognition criteria are satisfied. All other repair and maintenance costs are recognised in profit or loss as incurred. The present value of the expected cost for the decommissioning of an asset after its use is included in the cost of the respective asset if the recognition criteria for a provision are met.

An item of property, plant and equipment and any significant part initially recognised is derecognised upon disposal or when no future economic benefits are expected from its use or disposal. Any gain or loss arising on derecognition of the asset (calculated as the difference between the net disposal proceeds and the carrying amount of the asset) is included in the income statement when the asset is derecognised.

Borrowing costs directly attributable to the acquisition, construction or production of qualifying assets, which are assets that necessarily take a substantial period of time to get ready for their intended use or sale, are added to the cost of those assets, until such time as the assets are substantially ready for their intended use or sale.

## 3.12 Intangible assets

### 3.12.1 Intangible assets acquired separately

Intangible assets that are acquired separately are carried at cost less accumulated amortisation and accumulated impairment losses. Amortisation is recognised on a straight-line basis over their estimated useful lives.

The estimated useful life and amortisation method are reviewed at the end of each reporting period, with the effect of any changes in estimate being accounted for on a prospective basis. The amortisation expense on intangible assets with finite lives is recognised in the statement of profit and loss unless such expenditure forms part of carrying value of another asset.

**3.12.2 Internally generated intangibles,** excluding eligible development costs, are not capitalised and the related expenditure is reflected in profit or loss in the period in which the expenditure is incurred.

#### 3.12.3. Intangible assets acquired in a business combination

Intangible assets acquired in a business combination and recognised separately from goodwill are initially recognised at their fair value at the acquisition date, which is regarded as their cost.

Subsequent to initial recognition, intangible assets acquired in a business combination are reported at cost less accumulated amortisation and accumulated impairment losses, on the same basis as intangible assets that are acquired separately.

#### 3.12.4 Derecognition of intangible assets

An intangible asset is derecognised on disposal, or when no future economic benefits are expected from use or disposal. Gain or loss arising from Derecognition of an intangible asset, measured as the difference between the net disposal proceeds and the carrying amount of the asset, are recognised in profit or loss when the asset is derecognised.

### 3.13 Impairment of tangible and intangible assets other than goodwill

At the end of each reporting period, the Company reviews the carrying amount of tangible and intangible assets to determine whether there is any indication that those assets have suffered an impairment loss. If any such indication exists, the recoverable amount of the assets is estimated in order to determine the extent of the impairment loss (if any). When it is not possible to estimate the recoverable amount of an individual asset, the Company estimates the recoverable amount of the cash-generating unit to which the asset belongs. When a reasonable and consistent basis of allocation can be identified, corporate assets are also allocated to individual cash-generating units.

Intangible assets with indefinite useful lives and intangible assets not yet available for use are tested for impairment at least annually, and whenever there is an indication that the asset may be impaired.

Recoverable amount is higher of fair value less cost of disposal and value in use. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset.

If the recoverable amount of an asset (or cash-generating unit) is estimated to be less than its carrying amount, the carrying amount of the asset (or cash-generating unit) is reduced to its recoverable amount. An impairment loss is recognised immediately in profit or loss.

When an impairment loss subsequently reverses, the carrying amount of the asset (or a cash-generating unit) is increased to the revised estimate of its recoverable amount, but so that the increased carrying amount does not exceed the carrying amount that would have been determined had no impairment loss been recognised for the asset (or cash-generated unit) in prior years. A reversal of an impairment loss is recognised immediately in profit or loss.

### 3.14 Cash and cash equivalents (for purposes of Cash Flow Statement)

Cash comprises cash on hand and demand deposits with banks. Cash equivalents are short-term balances (with an original maturity of three months or less from the date of acquisition), highly liquid investments that are readily convertible into known amounts of cash and which are subject to insignificant risk of changes in value.

### 3.15 Cash Flow Statement

Cash flows are reported using the indirect method, whereby profit/(loss) before tax is adjusted for the effects of transactions of non-cash nature and any deferrals or accruals of past or future cash receipts or payments. The cash flows from operating, investing and financing activities of the Company are segregated based on the available information.

### 3.16 Inventories

Inventories are stated at the lower of cost and net-realisable value. Cost includes freight, taxes and duties net of GST/CENVAT/VAT credit wherever applicable. Customs duty payable on material in bonded warehouse is added to the cost.

In respect of raw materials, stores and spare parts and traded stock, cost is determined on weighted average basis. In respect of work in progress and finished goods, cost includes all direct costs and applicable production overheads, to bring the goods to the present location and condition. Net realisable value represents the estimated selling price for inventories less all estimated cost of completion and cost necessary to make the sale.

### 3.17 Provisions

Provisions are recognised when the Company has a present obligation (legal or constructive) as a result of a past event, it is probable that the Company will be required to settle the obligation, and a reliable estimate can be made of the amount of obligation.

The amount recognised as a provision is the best estimate of the consideration required to settle present obligation at the end of reporting period, taking into account the risk and uncertainty surrounding the obligation. When a provision is measured using the cash flows estimated to settle the present obligation, its carrying amount is the present value of these cash flows (when the effect of the time value of money is material).

When some or all of the economic benefits required to settle a provision are expected to be recovered from a third party, a receivable is recognised as an asset if it is virtually certain that reimbursement will be received and the amount of receivable can be measured reliably.

### 3.18 Contingent liabilities

Contingent liability is disclosed for (i) Possible obligation which will be confirmed only by future events not wholly within the control of the Company or (ii) Present obligations arising from past events where it is not probable that an outflow of resources will be required to settle the obligation or a reliable estimate of the amount of the obligation cannot be made. Contingent assets are not recognised in the financial statements.

### 3.19 Financial instruments

Financial assets and financial liabilities are recognised when the Company becomes a party to the contractual provision of the instruments.

Financial assets and financial liabilities are initially measured at fair value. Transaction costs that are directly attributable to the acquisition or issue of financial assets and financial liabilities (other than financial assets and financial liabilities at fair value through profit or loss) are added to or deducted from the fair value of the financial asset or financial liabilities, as appropriate, on initial recognition. Transaction cost directly attributable to the acquisition of financial assets or financial liabilities at fair value through profit or loss are recognised immediately in profit or loss.

### 3.20 Financial assets

All regular way purchases or sale of financial assets are recognised and derecognised on a trade date basis. Regular way purchases or sales are purchases or sale of financial assets that require delivery of assets within the time frame established by regulation or convention in the market place.

All recognised financial assets are subsequently measured in their entirety at either amortized cost or fair value, depending on the classification of the financial assets.

#### 3.20.1 Classification of financial assets

Debt instruments that meet the following conditions are subsequently measured at amortised cost (except for debt instruments that are designated as at fair value through profit or loss on initial recognition):

- the asset is held within business model whose objective is to hold assets in order to collect contractual cash flows; and
- the contractual terms of the instruments give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

For the impairment policy on financial assets measured at amortised cost, Refer Note: 3.20.4.

#### 3.20.2 Investment in equity instruments at Fair value through Other Comprehensive Income [FVTOCI]

On initial recognition, the Company can make an irrevocable election (on an instrument - by instrument basis) to present the subsequent changes in fair value in other comprehensive income pertaining to investment in equity instruments. This election is not permitted if the equity investment is held for trading.

These elected investments are initially measured at fair value plus transaction costs. Subsequently, they are measured at fair value with gain and loss arising from changes in fair value recognised in other comprehensive income and accumulated in the 'Reserve for equity instrument through other comprehensive income'. The cumulative gain or loss is not reclassified to profit or loss on disposal of the investments.

A financial asset is held for trading if:

- it has been acquired principally for the purpose of selling it in the near term;
- on initial recognition it is part of a portfolio of identified financial instruments that the Company manages together and has a recent actual pattern of short-term profit-taking; or
- it is a derivative that is not designated and effective as a hedging instrument or a financial guarantee.

The Company has equity instrument in two entities, which are not held for trading. The Company has elected the FVTOCI irrevocable option for both of these investments (Note: 6D). Fair value is determined in the manner described in Note: 34.

Dividend on these investments are recognised in profit or loss when the Company's right to receive the dividends is established, it is probable that the economic benefits associated with the dividend will flow to the entity, the dividend does not represent a recovery of part of cost of the investment and the amount of dividend can be measured reliably. Dividend recognised in profit and loss are included in 'Other income' line item.

#### 3.20.3 Financial assets at fair value through profit or loss (FVTPL)

Investments in equity instruments are classified as at FVTPL, unless the Company irrevocably elects on initial recognition to present subsequent changes in fair value in other comprehensive income for investments in equity instruments which are not held for trading (Note: 3.20.2).

Debt instruments that do not meet the amortised cost criteria or FVTOCI criteria are measured at FVTPL. In addition, debt instruments that meet the amortised cost criteria or the FVTOCI criteria but are designated as at FVTPL are measured at FVTPL.

A financial asset that meets the amortised cost criteria or debt instruments that meet the FVTOCI criteria may be designated as at FVTPL upon initial recognition if such designation eliminates or significantly reduces a measurement or recognition inconsistency that would arise from measuring assets or liabilities or recognising the gain or loss on them on different bases. The Company has not designated any such debt instrument as at FVTPL.

Financial asset at FVTPL is measured at fair value at the end of each reporting period, with gains or losses arising on remeasurement recognised in profit or loss. The net gain or loss recognised in profit or loss incorporate any dividend or interest earned on the financial asset and is included in the 'Other income' line item. Dividend on financial asset at FVTPL is recognised when the Company's right to receive the dividends is established. It is probable that the economic benefits associated with the dividend will flow to the entity which does not represent a recovery of part of cost of the investment and the amount can be measured reliably.

#### 3.20.4. Impairment of financial assets

The Company applied the expected credit loss model for recognising impairment loss on financial assets measured at amortised cost, debt instruments at FVTOCI, lease receivable, trade receivable, other contractual rights to receive cash or other financial asset, and financial guarantees not designated as at FVTPL.

Expected credit losses are the weighted average of credit losses with the respective risks of default occurring as the weights. Credit loss is the difference between all contractual cash flows that are due to the Company in accordance with the contract and all the cash flows that the Company expects to receive (i.e., all cash shortfalls), discounted at the original effective interest rate (or credit-adjusted effective interest rate for purchased or originated credit-impairment financial assets). The Company estimates cash flows by considering all contractual terms of the financial instrument (for example, prepayments, extension, call and similar options) through the expected life of that financial instruments.

The Company measures the loss allowance for the financial instruments at an amount equal to the lifetime expected credit losses if the credit risk on those financial instruments has increased significantly since initial recognition.

If the credit risk on financial instruments has not increased significantly since initial recognition, the Company measures the loss allowance for that financial instruments at an amount equal to 12 month expected credit losses. The twelve months expected credit losses are a portion of the lifetime cash shortfalls that will result if default occurs within 12 months after the reporting date and thus, are not cash shortfalls that are predicted over 12 months.

If the Company measured loss allowance for the financial instruments at life time expected credit loss model in the previous period, but determines at the end of a reporting period that the credit risk has not increased significantly since initial recognition due to improvement in credit quality as compared to the previous period, the Company again measures the loss allowance based on 12 month expected credit losses.

When making the assessment of whether there has been a significant increase in credit risk since initial recognition, the Company uses the change in the risk of a default occurring over the expected life of the financial instruments instead of the change in the amount of expected credit losses. To make the assessment, the Company compares the risk of a default occurring on the financial instrument as at the reporting date with the risk of a default occurring on the financial instrument as at the date of initial recognition and consider reasonable and supportable information, that is available without undue cost or effort, that is indicative of significant increase in credit risk since initial recognition.

For trade receivables or any contractual rights to receive cash or other financial assets that results from transactions that are within the scope of Ind AS 11 and Ind AS 18, the Company always measures the loss allowance at an amount equal to life time expected credit losses.

Further, for the purposes of measuring lifetime expected credit loss allowance for trade receivables, the Company has used a practical expedient as permitted under Ind AS 109. This expected credit loss allowance is computed based on a provision matrix which takes into account historical credit loss experience and adjusted for forward-looking information.

The impairment requirements for the recognition and measurement of a loss allowance are equally applied to debt instruments at FVTOCI except that the loss allowance is recognised in other comprehensive income and is not reduced from the carrying amount in the Balance Sheet.

#### 3.20.5 Derecognition of financial assets

The Company derecognises a financial asset when the contractual rights to the cash flows from the asset expire, or when it transfers the financial asset and substantially all the risks and rewards of ownership of the asset to another party. If the Company neither transfers nor retains subsequently all the risks and rewards of ownership and continues to control the transferred asset, the Company recognises its retained interest in the asset and an associated liability for the amount it may have to pay. If the Company retains substantially all the risks and rewards of ownership of a transferred financial asset, the Company continues to recognise the financial asset and also recognises a collateralised borrowing for the proceeds received.

On derecognition of a financial asset in its entirety, the difference between the asset's carrying amount and the sum of the consideration received and receivable and the cumulative gain or loss that had been recognised in other comprehensive income and accumulated in equity is recognised in profit or loss if such gain or loss would have otherwise been recognised in profit or loss on disposal of that financial asset.

On derecognition of a financial asset other than its entirety (eg., when the Company retains an option to repurchase part of a transferred asset), the Company allocates the previous carried over amount of financial asset between the part it continues to recognise under continuing involvement, and the part it no longer recognises on the basis of the relative fair values of those parts on the date of the transfer.

The difference between the carrying amount allocated to the part that is no longer recognised and the sum of consideration received for the part no longer recognised and any cumulative gain or loss allocated to it that had been recognised in profit or loss on disposal of that financial asset. A cumulative gain or loss that had been recognised in other comprehensive income is allocated between the part that continues to be recognised and the part that is no longer recognised on the basis of the relative fair value of those parts.

#### 3.20.6 Foreign exchange gain and loss

The fair value of financial assets denominated in foreign currency is determined in that foreign currency and translated at the spot rate at the end of each reporting period.

- For Foreign currency denominated financial asset measured at amortised cost and FVTPL, the exchange differences are recognised in profit or loss except for those which are designated hedging instruments in a hedging relationship.
- Changes in the carrying amount of investments in equity instruments at FVTOCI relating to changes in foreign currency rates are recognised in other comprehensive income.
- For the purposes of recognising foreign exchange gain and loss, FVTOCI debt instruments are treated as financial assets measured at amortised cost. Thus, the exchange differences on the amortised cost are recognised in profit or loss and other changes in the fair value of FVTOCI financial asset are recognised in other comprehensive income.

### 3.21 Financial liabilities and equity instruments

#### 3.21.1 Classification as debt or equity

Debt and equity instruments issued by a Company are classified as either financial liabilities or as equity in accordance with the substance of the contractual arrangements and the definition of a financial liabilities and an equity instrument.

### 3.21.2 Equity instruments

An equity instrument is a contract that evidences a residual interest in the asset of an entity after deducting all of its liabilities. Equity instruments issued by a Company is recognised at the proceeds received, net of direct issue costs.

### 3.21.3 Financial liabilities

All financial liabilities are subsequently measured at amortised cost using the effective interest methods or at FVTPL.

However, financial liabilities that arise when a transfer of a financial asset does not qualify for derecognition or when the continuing involvement approach applies, financial guarantee contracts issued by the Company, and commitments issued by the Company to provide a loan at below-market interest rate are measured in accordance with the specific accounting policies set out below:

#### 3.21.3.1 Financial liabilities at FVTPL

Financial liabilities are classified as at FVTPL when the financial liability is either contingent consideration recognised by the Company as an acquirer in a business combination to which Ind AS 103 applies or is held for trading or it is designated as at FVTPL.

A financial liability is classified as held for trading if:

- it has been incurred principally for the purpose of repurchasing it in the near term; or
- on initial recognition, it is part of a portfolio of identified financial instruments that the Company manages together and has a recent actual pattern of short-term profit-taking; or
- it is a derivative that is not designated and effective as a hedging instrument.

A financial liability other than a financial liability held for trading or contingent consideration recognised by the Company as an acquirer in a business combination to which Ind AS 103 applies, may be designated as at FVTPL upon initial recognition if:

- such designation eliminates or significantly reduces a measurement or recognition inconsistency that would otherwise arise.
- the financial liability forms part of a group of financial asset or financial liabilities or both, which is managed and its performance is evaluated on a fair value basis, in accordance with the Company’s documented risk management or investment strategy, and information about the grouping is provided internally on that basis; or
- it forms part of a contract containing one or more embedded derivatives, and Ind AS 109 permits the entire combined contracts to be designated as at FVTPL in accordance with Ind AS 109.

Financial liabilities at FVTPL are stated at fair value, with any gains or losses arising on remeasurement recognised in profit or loss. The net gain or loss recognised in profit or loss incorporates any interest paid on the financial liability and is included in the ‘Other income’ line item.

However, for not-held for trading financial liabilities that are designated as at FVTPL, the amount of change in the fair value of the financial liability that is attributable to changes in the credit risk of the liability recognised in other comprehensive income, unless the recognition of the effects of changes in the liability’s credit risk in other comprehensive income would create or enlarge an accounting mismatch in profit or loss, in which case these effect of changes in credit risk are recognised in profit or loss. Changes in fair value attributable to a financial liability’s credit risk that are recognised in other comprehensive income are reflected immediately in retained earnings and are not subsequently reclassified to profit or loss.

Gain or loss on financial guarantee contract and loan commitments issued by the Company that are designated by the Company as at fair value through profit or loss are recognised in profit or loss. Fair value is determined in the manner described in Note: 34.

#### 3.21.3.2 Financial liabilities subsequently measured at amortised cost

Financial liabilities are not held-for-trading and are not designated as at FVTPL are measured at amortised cost at the end of subsequent accounting periods. The carrying amounts of financial liabilities that are subsequently measured at amortised cost are determined based on the effective interest method. Interest expenses that is not capitalised as part of cost of an asset is included in the ‘Finance cost’ line item.

The effective interest method is a method of calculating the amortised cost of a financial liability and of allocating interest income over the relevant period. The effective interest rate is the rate that exactly discounts estimated future cash payments (including all fees and points paid or received that form an integral part of the effective interest rate, transaction costs and other premiums or discounts) through the expected life of the financial liability or, (where appropriate), a shorter period, to the net carrying amount on initial recognition.

#### 3.21.3.3 Financial guarantee contracts

A financial guarantee contract is a contract that requires the issuer to make specified payments to reimburse the holder for a loss it incurs because a specified debtor fails to make payments when due in accordance with the terms of a debt instrument.

Financial guarantee contracts issued by a Company are initially measured at their fair value and, if not designated as at FVTPL, are subsequently measured at a higher of:

- the amount of loss allowance determined in accordance with impairment requirement of Ind AS 109; and
- the amount initially recognised less, when appropriate, the cumulative amount of income recognised in accordance with the principles of Ind AS 18.

#### 3.21.3.4 Foreign exchange gain and loss

For financial liabilities that are denominated in a foreign currency and are measured at amortised cost at the end of each reporting period, the foreign exchange gain and loss are determined based on the amortised cost of the instruments and are recognised in 'Other income'.

The fair value of financial assets denominated in foreign currency is determined in that foreign currency and translated at the spot rate at the end of each reporting period. For financial liabilities that are measured at FVTPL, the foreign exchange component forms part of the fair value gain or loss and is recognised in profit or loss.

#### 3.21.3.5 Derecognition of financial liabilities

The Company derecognises financial liabilities when, and only when, the Company's obligations are discharged, cancelled or have expired. An exchange between a lenders of debt instruments with substantially different terms is accounted for as an extinguishment of the original financial liability and the recognition of a new financial liability. Similarly, a substantial modification of the terms of an existing financial liability (whether or not attributable to the financial difficulty of the debtor) is accounted for as an extinguishment of the original financial liability and the recognition of a new financial liability. The difference between the carrying amount of the financial liability derecognised and the consideration paid and payable is recognised in profit or loss.

### 3.22 Segment reporting

The accounting policies adopted for Segment reporting are in line with the accounting policies of the Company with the following additional policies:

- Inter-segment revenue is accounted on the basis of transactions which are primarily determined based on market/fair value factors.
- Revenue and expenses have been identified to segments on the basis of their relationship to the operating activities of the Segment. Revenue and expenses, which relate to the enterprise as a whole and are not allocable to Segments on a reasonable basis have been included under "Un-allocated Corporate expenses".

### 3.23 Leases

Assets leased by the Company in its capacity as a lessee, where substantially all the risks and rewards of ownership vest in the Company are classified as finance leases. Such leases are capitalised at the inception of the lease at the lower of the fair value and the present value of the minimum lease payments and a liability is created for an equivalent amount. Each lease rental paid is allocated between the liability and the interest cost so as to obtain a constant periodic rate of interest on the outstanding liability for each year.

### 3.24 Earnings per share

Basic earnings per share is computed by dividing the profit/(loss) after tax by the weighted average number of equity shares outstanding during the year. Diluted earnings per share is computed by dividing the profit/(loss) after tax as adjusted for dividend, interest and other charges to expense or income relating to the dilutive potential equity shares, by the weighted average number of equity shares considered for deriving basic earnings per share and the weighted average number of equity shares which could have been issued on the conversion of all dilutive potential equity shares.

Potential equity shares are deemed to be dilutive only if their conversion to equity shares would decrease the net profit per share from continuing ordinary operations. Potential dilutive equity shares are deemed to be converted as at the beginning of the period, unless they have been issued at a later date. The dilutive potential equity shares are adjusted for the proceeds receivable had the shares been actually issued at fair value (i.e. average market value of the outstanding shares). Dilutive potential equity shares are determined independently for each period presented. The number of equity shares and potentially dilutive equity shares are adjusted for share splits/reverse share splits and bonus shares, as appropriate.

### 3.25 Research and development

All revenue expenditure related to research and development are charged to the respective heads on the Statement of Profit and Loss. Capital expenditure incurred on research and development is capitalised as fixed assets and depreciated in accordance with the depreciation policy of the Company.

### 3.26 Derivative financial instruments

Derivatives are initially recognised at fair value at the date the derivative contracts are entered into and are subsequently remeasured to their fair values at the end of each reporting period. The resulting gain or loss is recognised in profit or loss immediately unless the derivate is designated and effective as hedging instrument, in which event the timing of the recognition in profit or loss depends on the nature of the hedging relationship and the nature of the hedged item.

### 3.27 Hedge accounting

The Company designates certain hedging instruments, which includes derivatives and non-derivatives in respect of foreign currency risk, at either fair value hedges, cash flow hedges, or hedges of net investments in foreign operations. Hedges of foreign exchange risk on firm commitments are accounted for as cash flow hedges.

At the inception of the hedge relationship, the entity documents the relationship between the hedging instrument and the hedged item, along with its risk management objectives and its strategy for undertaking various hedge transactions. Furthermore, at the inception of the hedge and on an ongoing basis, the entity documents whether the hedging instrument is highly effective in offsetting changes in fair values or cash flows of the hedged item attributable to the hedged risk.

#### 3.27.1 Fair value hedges

Changes in fair value of the designated portion of derivatives that qualify as fair value hedges are recognised in profit or loss immediately, together with any changes in the fair value of the hedging asset or liability that are attributable to the hedged risk. The change in the fair value of the designated portion of hedging instrument and the change in the hedged item attributable to the hedged risk are recognised in profit or loss in the line item relating to the hedged item.

Hedge accounting is discontinued when the hedging instruments expires or is sold, terminated, or exercised, or when it no longer qualify for hedge accounting. The fair value adjustment to the carrying amount of the hedged item arising from the hedged risk is amortised to profit or loss from that date.

### 3.27.2 Cash flow hedges

The effective portion of changes in the fair value of derivatives that are designated and qualify as cash flow hedges is recognised in other comprehensive income and accumulated under the heading of cash flow hedging reserve. The gain or loss relating to the ineffective portion is recognised immediately in profit or loss, and is included in the 'Other income' line item.

Amount previously recognised in other comprehensive income and accumulated in equity relating to (effective portion as described above) are reclassified to profit or loss in the periods when the hedged item affect profit or loss, in the same line as the recognised hedged item. However, when the hedged forecast transaction results in the recognition of non-financial asset or a non-financial liability, such gain or loss are transferred from equity (but not as a reclassification adjustment) and included in the initial measurement of the cost of the non-financial asset or non-financial liability.

In cases, where the designated hedging instruments are options and forward contracts, the Company has an option, for each designation, to designate on an instrument only the changes in intrinsic value of the option and spot element of forward contract respectively as hedges. In such cases the time value of the options is accounted based on the type of hedged item which those options hedge.

In case of transaction related hedged item in the above cases, the change in time value of the options is recognised in other comprehensive income to the extent it relates to the hedged item and accumulated in a separate component of equity i.e. Reserve for time value of options and forward elements of forward contract in hedging relationship. This separate component is removed and directly included in the initial cost or other carrying amount of the asset or the liability (i.e. not as a reclassification adjustment thus not affecting other comprehensive income) if the hedged item subsequently results in recognition of a non-financial asset or non-financial liability. In other cases, the amount accumulated is reclassified to profit or loss as a reclassification adjustment in the same period in which the hedged expected future cash flow affects profit or loss.

In case of time period related hedged item in the above cases, the change in time value of the options is recognised in other comprehensive income to the extent it relates to the hedged item and accumulated in a separate component of equity i.e. Reserve for time value of options and forward elements of forward contracts in hedging relationship. The time value of options at the date of designation of the options in the hedging relationship is amortised on a systematic and rational basis over the period during which the options intrinsic value could affect profit or loss. This is done as a reclassification adjustment and hence affects other comprehensive income.

In cases where only the spot element of the forward contracts is designated in a hedging relationship and the forward element of the forward contract is not designated, the Company makes the choice for each designation whether to recognise the changes in forward element of fair value of the forward contracts in profit or loss or to account for this element similar to the time value of option (as described above).

Hedge accounting is discontinued when the hedging instrument expires or is sold, terminated, or exercised, or when it no longer qualifies for hedge accounting. Any gain or loss recognised in other comprehensive income and accumulated in equity at that time remains in equity and is recognised when the forecasted transactions is ultimately recognised in profit or loss. When a forecasted transaction is no longer expected to occur, the gain or loss accumulated in equity is recognised immediately in profit or loss.

## 3.28 Insurance claims

Insurance claims are accounted for on the basis of claims admitted/expected to be admitted and to the extent that the amount recoverable can be measured reliably and it is reasonable to expect ultimate collection.

## 3.29 Operating cycle

Based on the nature of the products/activities of the Company and the normal time between acquisition of assets and their realisation in cash or cash equivalents, the Company has determined its operating cycle as 12 months for the purpose of classification of its assets and liabilities as current and non-current.

(in Indian Rupees million, unless otherwise stated)

## 4.Property, plant and equipment

| Particulars | As at 31.03.2018 | As at 31.03.2017 |
|---|---|---|
| **A. Carrying amounts** | | |
| Freehold land | 37.86 | 37.86 |
| Buildings | 1227.05 | 1194.74 |
| Plant and equipment | 2924.59 | 2703.58 |
| Furniture and fittings | 40.82 | 40.27 |
| Vehicles | 13.14 | 6.48 |
| Vehicles under finance lease | 12.50 | 21.08 |
| **Total** | **4255.96** | **4004.01** |
| **B. Capital work-in-progress:** | **169.63** | **514.09** |

| Cost | Freehold land | Buildings (a) | Plant and equipment | Furniture and fittings | Vehicles | Vehicles under finance lease | Total |
|---|---|---|---|---|---|---|---|
| **Balance at March 31, 2016** | **37.86** | **1154.48** | **2959.00** | **50.89** | **8.82** | **26.04** | **4237.09** |
| Additions - **(b)** | - | 151.37 | 814.62 | 14.44 | 0.99 | 8.68 | 990.10 |
| Disposals | - | (0.04) | (7.70) | (0.56) | (1.17) | (0.27) | (9.74) |
| **Balance at March 31, 2017** | **37.86** | **1305.81** | **3765.92** | **64.77** | **8.64** | **34.45** | **5217.45** |
| Additions - **(b)** | - | 98.04 | 848.48 | 11.07 | 8.38 | 0.70 | 966.67 |
| Disposals | - | (4.35) | (63.31) | (7.30) | (1.54) | (1.51) | (78.01) |
| **Balance at March 31, 2018** | **37.86** | **1399.50** | **4551.09** | **68.54** | **15.48** | **33.64** | **6106.11** |

| Accumulated depreciation and impairment | Freehold land | Buildings | Plant and equipment | Furniture and fittings | Vehicles | Vehicles under finance lease | Total |
|---|---|---|---|---|---|---|---|
| **Balance at March 31, 2016** | **-** | **54.38** | **509.54** | **12.40** | **1.13** | **5.20** | **582.65** |
| Depreciation expense | - | 56.69 | 556.30 | 12.61 | 1.32 | 8.44 | 635.36 |
| Eliminated on disposals | - | - | (3.50) | (0.51) | (0.29) | (0.27) | (4.57) |
| **Balance at March 31, 2017** | **-** | **111.07** | **1062.34** | **24.50** | **2.16** | **13.37** | **1213.44** |
| Depreciation expense | - | 62.68 | 621.15 | 10.51 | 1.72 | 8.96 | 705.02 |
| Eliminated on disposals | - | (1.30) | (56.99) | (7.29) | (1.54) | (1.19) | (68.31) |
| **Balance at March 31, 2018** | **-** | **172.45** | **1626.50** | **27.72** | **2.34** | **21.14** | **1850.15** |

| Carrying Amounts | Freehold land | Buildings | Plant and equipment | Furniture and fittings | Vehicles | Vehicles under finance lease | Total |
|---|---|---|---|---|---|---|---|
| **Balance at March 31, 2016** | **37.86** | **1100.10** | **2449.46** | **38.49** | **7.69** | **20.84** | **3654.44** |
| Additions | - | 151.37 | 814.62 | 14.44 | 0.99 | 8.68 | 990.10 |
| Depreciation expense | - | (56.69) | (556.30) | (12.61) | (1.32) | (8.44) | (635.36) |
| Disposals (net) | - | (0.04) | (4.20) | (0.05) | (0.88) | - | (5.17) |
| **Balance at March 31, 2017** | **37.86** | **1194.74** | **2703.58** | **40.27** | **6.48** | **21.08** | **4004.01** |
| Additions | - | 98.04 | 848.48 | 11.07 | 8.38 | 0.70 | 966.67 |
| Depreciation expense | - | (62.68) | (621.15) | (10.51) | (1.72) | (8.96) | (705.02) |
| Disposals (net) | - | (3.05) | (6.32) | (0.01) | - | (0.32) | (9.70) |
| **Balance at March 31, 2018** | **37.86** | **1227.05** | **2924.59** | **40.82** | **13.14** | **12.50** | **4255.96** |

(in Indian Rupees million, unless otherwise stated)

| Capital work in progress movement | Total |
|---|---|
| **Balance at March 31, 2016** | **678.03** |
| Addition during the year | 826.16 |
| Capitalised during the year | (990.10) |
| **Balance at March 31, 2017** | **514.09** |
| Addition during the year | 622.21 |
| Capitalised during the year | (966.67) |
| **Balance at March 31, 2018** | **169.63** |

**(a)** Includes ₹602.20 million (Previous year: ₹595.62 million) being cost of building on leasehold land.

**(b)** Includes Research and Development capital expenditure of ₹26.54 million (Previous year: ₹11.45 million) - Refer Note: 40(b) on Research & Development expenditure.

**(c) Assets pledged as security**

Immovable properties of the Company carry pari-passu charge in favour of the consortium of bankers, as security for banking facilities availed.

The vehicles purchased through finance lease arrangement are hypothecated to the lessor.

**(d) Capitalised borrowing cost**

Borrowing costs capitalised on property, plant and equipment during the year - ₹ Nil (Previous year: ₹ Nil).

**(e) Contractual obligations**

Refer Note: 30B for disclosure of Contractual commitments for the acquisition of property, plant and equipment.

## 5. Intangible assets

| Particulars | As at 31.03.2018 | As at 31.03.2017 |
|---|---|---|
| **A. Carrying amounts** | | |
| Software | 9.09 | 8.76 |
| Technical know-how | 39.36 | 68.14 |
| **Total** | **48.45** | **76.90** |
| | | |
| **B. Intangible assets under development** | **0.29** | **0.33** |

| Cost | Software | Technical know-how | Total |
|---|---|---|---|
| **Balance at March 31, 2016** | **15.68** | **117.97** | **133.65** |
| Additions - **(a)** | 5.77 | 6.17 | 11.94 |
| **Balance at March 31, 2017** | **21.45** | **124.14** | **145.59** |
| Additions - **(a)** | 5.41 | - | 5.41 |
| **Balance at March 31, 2018** | **26.86** | **124.14** | **151.00** |

| Accumulated amortisation and impairment | Software | Technical know-how | Total |
|---|---|---|---|
| **Balance at March 31, 2016** | **7.39** | **27.30** | **34.69** |
| Amortisation expense | 5.30 | 28.70 | 34.00 |
| **Balance at March 31, 2017** | **12.69** | **56.00** | **68.69** |
| Amortisation expense | 5.08 | 28.78 | 33.86 |
| **Balance at March 31, 2018** | **17.77** | **84.78** | **102.55** |

(in Indian Rupees million, unless otherwise stated)

| Carrying amounts | Software | Technical know-how | Total |
|---|---|---|---|
| **Balance at March 31, 2016** | **8.29** | **90.67** | **98.96** |
| Additions | 5.77 | 6.17 | 11.94 |
| Amortisation expense | (5.30) | (28.70) | (34.00) |
| **Balance at March 31, 2017** | **8.76** | **68.14** | **76.90** |
| Additions | 5.41 | - | 5.41 |
| Amortisation expense | (5.08) | (28.78) | (33.86) |
| **Balance at March 31, 2018** | **9.09** | **39.36** | **48.45** |

**(a)** Includes Research and Development capital expenditure of ₹0.02 million (Previous year: ₹2.29 million) - Refer Note: 40(b) on Research & Development expenditure.

## 6. Investments - Non Current

| Particulars | Quantity in numbers | | Nominal value (g) | Notes | Value | |
|---|---|---|---|---|---|---|
| | As at 31.03.2018 | As at 31.03.2017 | | | As at 31.03.2018 | As at 31.03.2017 |
| **Non Current investments:** | | | | | | |
| **(A) Investment in associate - Equity Shares (fully paid) Quoted (Trade): Instruments at cost** | | | | | | |
| Wendt (India) Ltd. | 797,352 | 797,352 | 10 | | 10.36 | 10.36 |
| | | | | **6A** | **10.36** | **10.36** |
| **(B) Investments in joint ventures - Equity Shares (fully paid) Unquoted (Trade): Instruments at cost** | | | | | | |
| Murugappa Morgan Thermal Ceramics Ltd. | 1,430,793 | 1,430,793 | 10 | | 44.04 | 44.04 |
| Ciria India Ltd. | 59,998 | 59,998 | 10 | | 1.68 | 1.68 |
| | | | | **6B** | **45.72** | **45.72** |
| **(C) Investments in subsidiaries - Equity Shares (fully paid) Unquoted (Trade): Instruments at cost** | | | | | | |
| CUMI International Ltd., Cyprus | 25,737,406 | 25,737,406 | USD 1 | | 2195.80 | 2195.80 |
| Sterling Abrasives Ltd. | 54,000 | 54,000 | 100 | | 37.10 | 37.10 |
| Southern Energy Development Corporation Ltd. | 389,908 | 389,908 | 10 | | 54.66 | 54.66 |
| Net Access India Ltd. - **(a)** | 5,000,000 | 5,000,000 | 10 | | 50.00 | 50.00 |
| CUMI (Australia) Pty Ltd., Australia | 1,050 | 1,050 | AUD 1 | | 14.79 | 14.79 |
| | | | | **6C** | **2352.35** | **2352.35** |
| **(D) Other Investments Instruments at Fair Value Through Other Comprehensive Income [FVTOCI]** | | | | | | |
| **Investments in equity instruments - Equity Shares (fully paid)** | | | | | | |
| **Quoted (Trade)** | | | | | | |
| Coromandel Engineering Co. Ltd. | 3,042,900 | 3,042,900 | 10 | | 144.85 | 118.22 |
| **Unquoted (Non - Trade)** | | | | | | |
| Murugappa Management Services Ltd. | 44,704 | 44,704 | 100 | | 11.30 | 11.30 |
| | | | | **6D(i)** | **156.15** | **129.52** |

(in Indian Rupees million, unless otherwise stated)

| Particulars | Quantity in numbers | | Nominal value (g) | Notes | Value | |
|---|---|---|---|---|---|---|
| | As at 31.03.2018 | As at 31.03.2017 | | | As at 31.03.2018 | As at 31.03.2017 |
| **Instruments at Fair Value Through Profit or Loss [FVTPL]** | | | | | | |
| **Quoted (Non-Trade) Investments in equity instruments - Equity Shares (fully paid)** | | | | | | |
| Grindwell Norton Ltd. - **(b)** | 800 | 800 | 5 | | 0.40 | 0.28 |
| Orient Abrasives Ltd. | 10,000 | 10,000 | 1 | | 0.35 | 0.35 |
| Orient Refractories Ltd. | 10,000 | 10,000 | 1 | | 1.59 | 1.29 |
| EID Parry (India) Ltd. | 1,000 | 1,000 | 1 | | 0.28 | 0.28 |
| Cholamandalam Investment and Finance Co Ltd. | 100 | 100 | 10 | | 0.15 | 0.10 |
| TI Financial Holdings Ltd. **(c)** | 1,000 | 1,000 | 1 | | 0.65 | 0.63 |
| Tube Investments of India Ltd. **(c)** | 1,000 | - | 1 | | 0.22 | - |
| Coromandel International Ltd. | 330 | 330 | 1 | | 0.17 | 0.10 |
| | | | | **6D(ii)** | **3.81** | **3.03** |
| **Unquoted (Non-Trade) Investments in equity instruments - Equity Shares (fully paid)** | | | | | | |
| Chennai Willingdon Corporate Foundation(₹50 only) **- (d)** | 5 | 5 | 10 | | 0.00 | 0.00 |
| John Oakey Mohan Ltd. | 1,900 | 1,900 | 10 | | 0.05 | 0.05 |
| CUMI Employees Co-operative Society/Stores | - | - | - | | 0.03 | 0.03 |
| Kerala Enviro Infrastructure Ltd. | 10,000 | 10,000 | 10 | | 0.10 | 0.10 |
| **Other Investment** | | | | | | |
| 7 Years National Savings Certificate of ₹2,000/- deposited with the Government | - | - | - | | 0.00 | 0.00 |
| | | | | **6D(iii)** | **0.18** | **0.18** |
| | | | | **6D** | **160.14** | **132.73** |
| **Investment - Non Current Grant Total [ 6A ] + [ 6B ] + [ 6C ] + [ 6D ]** | | | | | **2568.57** | **2541.16** |

| Particulars | | Value | |
|---|---|---|---|
| | | As at 31.03.2018 | As at 31.03.2017 |
| **Other Investment - Current** | | | |
| Instruments at Fair Value Through Profit or Loss [FVTPL] - Mutual Fund | **6E** | **544.79** | - |

**(a)** During previous year, the Company invested in 3,400,000 equity shares of ₹10 each at par in Net Access India Ltd.

**(b)** During previous year, Grindwell Norton Ltd. issued bonus shares in the ratio of 1:1.

**(c)** During the current year, TI Financial Holdings Ltd. under a scheme of arrangement demerged into TI Financial Holdings Ltd. and Tube Investments of India Ltd. Consequently, the face value of equity share of TI Financial Holding Ltd. was changed from ₹2 per share to ₹1 per share.

**(d)** Shares allotted against corporate membership contribution.

(in Indian Rupees million, unless otherwise stated)

(e)

| Particulars | As at | |
|---|---|---|
| | 31.03.2018 | 31.03.2017 |
| Aggregate book value of quoted investments | 703.81 | 131.61 |
| Aggregate market value of quoted investments | 2640.18 | 1633.23 |
| Aggregate carrying value of unquoted investments | 2409.55 | 2409.55 |

(f)

| Categorywise other investment as per Ind AS 109 | As at | |
|---|---|---|
| | 31.03.2018 | 31.03.2017 |
| Mandatorily measured at FVTPL - 6D(ii)+6D(iii)+ 6E | 548.78 | 3.21 |
| Financial assets designated at FVTOCI (equity instruments) - 6D(i) | 156.15 | 129.52 |
| Investments at cost (includes investment in associate, joint ventures and subsidiaries) - 6A+6B+6C | 2408.43 | 2408.43 |
| | **3113.36** | **2541.16** |

**(g)** Nominal value per share is given in Indian Rupees or in respective foreign currency where stated.

## 7. Other financial assets.

| Particulars | As at | |
|---|---|---|
| | 31.03.2018 | 31.03.2017 |
| **A. Non-current** | | |
| Security deposits | 109.54 | 99.87 |
| | **109.54** | **99.87** |
| **B. Current** | | |
| Advances to employees | 9.05 | 9.85 |
| Other receivables: | | |
| Considered good | 37.90 | 33.75 |
| Considered doubtful | 1.11 | 0.92 |
| Less: Allowance for doubtful receivables | (1.11) | (0.92) |
| | **46.95** | **43.60** |

## 8. Other assets

| Particulars | As at | |
|---|---|---|
| | 31.03.2018 | 31.03.2017 |
| **A. Non-current** | | |
| Capital advances | 26.67 | 92.91 |
| Prepayments | 77.54 | 78.41 |
| Deposits paid under protest relating to Sales tax, Value Added Tax, Central excise and Service tax demands | 16.38 | 19.49 |
| Taxation (net of provisions) | 43.65 | 38.32 |
| | **164.24** | **229.13** |
| **B. Current** | | |
| Prepayments | 31.73 | 27.87 |
| Recoverable from Electricity Board - Banked power | - | 74.61 |
| Trade advance to Suppliers | 195.75 | 204.07 |
| Balances with/amount receivable from Statutory Authorities: | 142.85 | 247.70 |
| | **370.33** | **554.25** |

(in Indian Rupees million, unless otherwise stated)

## 9. Inventories

| Particulars | As at | |
|---|---|---|
| | 31.03.2018 | 31.03.2017 |
| Raw materials | 1049.94 | 675.81 |
| Raw materials in transit | 123.86 | 68.94 |
| Work-in-progress | 620.17 | 601.45 |
| Stock-in-trade | 122.05 | 161.70 |
| Stock-in-trade in transit | 25.51 | - |
| Finished goods | 441.63 | 583.97 |
| Stores and spares | 220.82 | 175.85 |
| | **2603.98** | **2267.72** |

**a.** The method of valuation of inventories are stated in Note: 3.16.

**b.** The cost of inventories recognised as an expense (consumption) during the year was ₹7,606.90 million (previous year: ₹6581.26 million) and such expenses includes ₹15.89 million towards reversal of write-down of inventory to net realisable value (the corresponding reversal for previous year was ₹7.22 million). The write-down of inventory to net realisable value made in earlier years were reversed in current year as a result of increased realisation in certain market/segments

**c.** All the above inventories are expected to be recovered/utilised within twelve months.

## 10. Trade receivables (Unsecured)

| Particulars | As at | |
|---|---|---|
| | 31.03.2018 | 31.03.2017 |
| **Current** | | |
| Considered good | 3267.44 | 2562.84 |
| Doubtful | 70.96 | 50.35 |
| Allowance for doubtful receivables (expected credit loss allowance) | (70.96) | (50.35) |
| | **3267.44** | **2562.84** |

**a.** Trade receivables are generally due between 30 to 60 days. The Company's term includes charging of interest for delayed payment beyond agreed credit days. However, the Company charges interest after considering the historical trend, business prospects, reason for delay, market conditions etc.

**b.** **Credit risk** is managed at the operational segment level. The credit limit and credit period are fixed for each customer after evaluating the financial position, past performance, business opportunities, credit references etc. The credit limit and the credit period are reviewed regularly at periodical intervals.

**c.** **Concentration risk** considers significant exposures relating to industry, counterparty, geography, currency etc. The concentration of credit risk is not significant as the customer base is large and diversified.

**d.** The Company has used a practical expedient by computing the expected credit loss allowance for trade receivables based on provision matrix which takes into account the historical credit loss experience adjusted for forward looking information.

**e.** Some trade receivable may be past due over 365 days without being impaired considering the certainty of realisation.

**f.** Movement in expected credit loss allowance:

| Particulars | As at | |
|---|---|---|
| | 31.03.2018 | 31.03.2017 |
| Balance at the beginning of the year | **50.35** | **72.36** |
| Add: Allowance made during the year | 30.32 | 17.69 |
| Less: Reversal of allowance during the year | (9.71) | (39.70) |
| **Balance at the end of the year** | **70.96** | **50.35** |

(in Indian Rupees million, unless otherwise stated)

## 11A. Cash and cash equivalents

| Particulars | As at | |
|---|---|---|
| | 31.03.2018 | 31.03.2017 |
| Balances with banks | 191.50 | 63.13 |
| Deposit account | 3.23 | 3.03 |
| Cash on hand | 0.94 | 0.89 |
| | **195.67** | **67.05** |

**Non-cash transactions:**

During the year, the Company has not entered into any non-cash transactions on investing and financing activities.

## 11B. Bank balances other than above

| Particulars | As at | |
|---|---|---|
| | 31.03.2018 | 31.03.2017 |
| Earmarked funds - Unclaimed and unpaid dividend - Refer Note: 18 | 12.76 | 12.21 |

## 12. Equity Share Capital

| Particulars | As at | |
|---|---|---|
| | 31.03.2018 | 31.03.2017 |
| **Authorised share capital:** | | |
| 387,250,000 (as at March 31, 2017: 387,250,000) equity shares of ₹1 each | 387.25 | 387.25 |
| **Issued, Subscribed and Paid-up** | | |
| 188,955,751 (as at March 31, 2017: 188,658,090) equity shares of ₹1 each fully paid | **188.96** | **188.66** |

**a) Reconciliation of the shares outstanding at the beginning and at the end of the reporting period**

| Particulars | As at 31.03.2018 | | As at 31.03.2017 | |
|---|---|---|---|---|
| **Equity shares with voting rights** | **No. of Shares** | **Value of Shares** | **No. of Shares** | **Value of Shares** |
| At the beginning of the year | 188,658,090 | 188.66 | 188,379,560 | 188.38 |
| Add: Shares issued against Employee Stock Option Scheme/Plan | 297,661 | 0.30 | 278,530 | 0.28 |
| At the end of the year | **188,955,751** | **188.96** | **188,658,090** | **188.66** |

The Company has received share application money for 1500 shares under Employee Stock Option Scheme 2007, which is pending for allotment. This receipt is shown under "Other equity" - Refer Note no: 13C .

**b) Terms / Rights attached to Equity Shares**

The Company has only one class of Equity shares having a par value of ₹1/- per share. Each holder of equity shares is entitled to one vote per share. Repayment of capital will be in proportion to the number of equity shares held.

**c) Dividend details**

An interim dividend of ₹1/- per share was declared at the meeting of the Board of Directors held on February 14, 2018 and the same has been paid (previous year an interim dividend of ₹1/- per share was declared at the meeting of the Board of Directors held on February 04, 2017 and the same has been paid).

Final dividend of ₹1.25 per share is proposed for the year ended March 31, 2018 (previous year final dividend of ₹0.75 was proposed and paid). The dividend proposed by the Board of Directors is subject to the approval of the shareholders in the ensuing Annual General Meeting, upon which the liability will be recorded in the books.

(in Indian Rupees million, unless otherwise stated)

d) **Details of shares held by shareholders holding more than 5% of the aggregate shares in the Company**

| Name of the Shareholder | As at | | | |
|---|---|---|---|---|
| | 31.03.2018 | | 31.03.2017 | |
| | No. of Shares held | % of holding | No. of Shares held | % of holding |
| Ambadi Investments Ltd.* | 56,054,244 | 29.67% | 3,121,960 | 1.65% |
| Murugappa Holdings Ltd.** | - | - | 55,432,284 | 29.38% |
| HDFC Trustee Company Ltd.* | 16,873,797 | 8.93% | 16,864,050 | 8.94% |

* Holdings combined based on the PAN of the shareholders

** Merged with Ambadi Investments Ltd. (formerly known as Ambadi Investments Private Ltd.) w.e.f. 28th August 2017

e) **Stock Options granted under the Company's Employee Stock Option Scheme/Plan**

Stock Options granted under the Company's Employee Stock Option Scheme/Plan pending exercise by option holders carry no right to dividend and voting rights. Further details of the Employee Stock Option Scheme/Plan are provided in Note: 36.

## 13. Other equity

| Particulars | As at | |
|---|---|---|
| | 31.03.2018 | 31.03.2017 |
| **A. Reserves and Surplus** | | |
| a. Profit on Forfeiture of shares / warrants | 6.03 | 6.03 |
| b. Capital redemption reserve | 27.68 | 27.68 |
| c. Securities premium | 226.19 | 194.15 |
| d. General reserve | 6675.43 | 6175.43 |
| e. Share options outstanding account | 30.84 | 16.08 |
| f. Retained earnings | 4433.18 | 3860.74 |
| **B. Items of Other Comprehensive Income** | | |
| g. Reserve for equity instruments | 84.42 | 57.79 |
| h. Revaluation Surplus | 23.74 | 23.74 |
| **C. Share application money pending allotment** | | |
| i. Share application money pending allotment | 0.23 | - |
| **Total Other equity** | **11507.74** | **10361.64** |

**a. Profit on Forfeiture of shares/warrants**

| Particulars | As at | |
|---|---|---|
| | 31.03.2018 | 31.03.2017 |
| Balance at the beginning of the year | 6.03 | 6.03 |
| Movements | - | - |
| **Balance at end of the year** | **6.03** | **6.03** |

During 1999, an amount of ₹6.03 million has been added on account of forfeiture of shares. This balance can be used in paying up unissued shares as fully paid bonus shares to the shareholders of the Company.

**b. Capital redemption reserve**

| Particulars | As at | |
|---|---|---|
| | 31.03.2018 | 31.03.2017 |
| Balance at the beginning of the year | 27.68 | 27.68 |
| Movements | - | - |
| **Balance at end of the year** | **27.68** | **27.68** |

During the year 2000-01, the Company bought back 2,768,000 shares at the then face value of ₹10 each at the price of ₹115 per share from the shareholders, pursuant to the offer of buy back of shares. A sum equal to nominal value of shares so bought back was transferred to capital redemption reserve account as per Companies Act, 1956. This reserve can be used in paying up unissued shares as fully paid bonus shares to the shareholders of the Company.

(in Indian Rupees million, unless otherwise stated)

**c. Securities premium**

| Particulars | As at | |
|---|---|---|
| | 31.03.2018 | 31.03.2017 |
| Balance at the beginning of the year | 194.15 | 166.61 |
| Movements | 32.04 | 27.54 |
| **Balance at end of the year** | **226.19** | **194.15** |

The Securities premium received during the year represents the premium received towards allotment of 297,661 shares. Cumulatively 2,247,751 equity shares were allotted during the period FY 2009-10 to FY 2017-18 under ESOP Scheme 2007 and ESOP Plan 2016(Refer Note: 36 towards details of the Scheme/Plan).

This balance will be utilised in accordance with the provisions of Section 52 of the Companies Act 2013 towards issuance of fully paid bonus shares, write-off of preliminary expenses, commission / discount expenses on issue of shares / debentures, premium payable on redemption of redeemable preference shares / debentures and buy back of its own shares / securities under Section 68 of the Companies Act.

**d. General reserve**

| Particulars | As at | |
|---|---|---|
| | 31.03.2018 | 31.03.2017 |
| Balance at the beginning of the year | 6175.43 | 5675.43 |
| Transfer from retained earnings | 500.00 | 500.00 |
| **Balance at end of the year** | **6675.43** | **6175.43** |

The general reserve is a free reserve, retained from Company's profits and can be utilized upon fulfilling certain conditions in accordance with the Companies Act**.**

**e. Share options outstanding account**

| Particulars | As at | |
|---|---|---|
| | 31.03.2018 | 31.03.2017 |
| Balance at the beginning of the year | 16.08 | 11.77 |
| Movements | 14.76 | 4.31 |
| **Balance at end of the year** | **30.84** | **16.08** |

Under Ind AS 102, fair value of the options granted is to be expensed out over the life of the vesting period as employee compensation costs reflecting period of receipt of service. Refer Note: 36 for details.

**f. Retained earnings:**

| Particulars | As at | |
|---|---|---|
| | 31.03.2018 | 31.03.2017 |
| Balance at the beginning of the year | 3860.74 | 3372.71 |
| Add: Profits for the year | 1434.79 | 1217.75 |
| Add: Other Comprehensive Income arising from remeasurement of defined benefit obligation net of tax | 3.32 | (25.34) |
| Less: Transfer to General reserve | (500.00) | (500.00) |
| Less: Final dividend paid | (141.51) | - |
| Less: Dividend tax on Final dividend | (14.92) | - |
| Less: Interim dividend paid | (188.93) | (188.63) |
| Less: Dividend tax on interim dividend | (20.31) | (15.75) |
| **Balance at end of the year** | **4,433.18** | **3860.74** |

The amount that can be distributed by the Company as dividend to its equity shareholders is determined based on the financial position and dividend policy of the Company and in compliance with the requirements of the Companies Act, 2013.

(in Indian Rupees million, unless otherwise stated)

**g. Reserve for equity instruments**

| Particulars | As at | |
|---|---|---|
| | **31.03.2018** | **31.03.2017** |
| Balance at the beginning of the year | 57.79 | 111.95 |
| Movements | 26.63 | (54.16) |
| Balance at end of the year | **84.42** | **57.79** |

This reserve represents the cumulative gains and losses arising on the revaluation of equity instruments measured at fair value through other comprehensive income (Refer Note: 6D(i)), which will be reclassified to retained earnings when those assets are disposed off.

**h. Revaluation Surplus**

| Particulars | As at | |
|---|---|---|
| | **31.03.2018** | **31.03.2017** |
| Balance at the beginning of the year | 23.74 | 23.74 |
| Movements | - | - |
| **Balance at end of the year** | **23.74** | **23.74** |

Land & Buildings added upto 31st August 1984 were revalued in 1984 based on the valuation done by an independent valuer. The value added on revaluation amounting to ₹58.41 million was credited to fixed asset revaluation reserve. The depreciation charged on the revalued portion was recouped every year from this reserve upto March 31, 2015 under previous GAAP.

**i. Share application money pending allotment**

| Particulars | As at | |
|---|---|---|
| | **31.03.2018** | **31.03.2017** |
| Balance at the beginning of the year | - | - |
| Movements | 0.23 | - |
| **Balance at end of the year** | **0.23** | **-** |

Share application money pending for allotment under ESOP scheme. This represents the amount to the extent not refundable.

## 14. Non - Current borrowings

| Particulars | | | As at | |
|---|---|---|---|---|
| | **Maturity date** | **Repayment terms** | **31.03.2018** | **31.03.2017** |
| **Secured** | | | | |
| Finance lease obligation (consisting of multiple contracts with varied maturities) - Refer (a) | Ranging from 2016 to 2022 | Monthly instalments | 18.09 | 25.98 |
| Less: Current maturities of finance lease obligation (included in Note: 18) | | | 7.31 | 8.04 |
| **Total Non - Current borrowings** | | | **10.78** | **17.94** |

**a.** Secured by the assets (vehicles) leased under the finance lease arrangement. The obligation consists of fixed rate of debt with repayment periods of not exceeding 4 years (Refer Note: 42)

**b.** As per amended provisions of Ind AS 7 Statement of Cash flows, the disclosure relating to "Changes in liabilities arising from financial activities" which is becoming effective from periods beginning 1 April, 2017 is given below:

| **Net debts reconciliation:** | **Note** | **As at 31.03.2018** | **As at 31.03.2017** |
|---|---|---|---|
| Cash and Cash equivalents | 11A | 195.67 | 67.05 |
| Other investments (liquid) | 6E | 544.79 | - |
| Non Current borrowings (including current maturities) | 14 | (18.09) | (25.98) |
| **Net Cash/(Net debt)** | | **722.37** | **41.07** |

(in Indian Rupees million, unless otherwise stated)

| Particulars | Other assets | | Liabilities from Financing activities | Total |
|---|---|---|---|---|
| | Cash and Cash equivalents | Other investments (liquid) | Non Current borrowings (including current maturities) | |
| Net Cash/(Net debt) as at 31st March 2017 | 67.05 | - | (25.98) | 41.07 |
| Changes from Financing Cash flows | 128.62 | 544.79 | 7.89 | 681.30 |
| Net Cash/(Net debt) as at 31st March 2018 | 195.67 | 544.79 | (18.09) | 722.37 |

## 15. Provisions

| Particulars | As at | |
|---|---|---|
| | 31.03.2018 | 31.03.2017 |
| **A. Non Current** | | |
| Employee benefits - Compensated absences | 56.95 | 43.84 |
| **B. Current** | | |
| Employee benefits - Compensated absences | 39.10 | 39.46 |

The movement represents the provision created for the year arising out of the actuarial valuation after considering the actual settlements made during the year.

## 16. Deferred tax liabilities (net)

| Particulars | As at | |
|---|---|---|
| | 31.03.2018 | 31.03.2017 |
| Deferred tax liabilities (net) | 260.79 | 340.65 |

Deferred tax liabilities are the amounts of income taxes payable in future periods in respect of taxable temporary differences.

Deferred tax assets are the amounts of income taxes recoverable in future periods in respect of: (a) deductible temporary differences; (b) the carry forward of unused tax losses; and (c) the carry forward of unused tax credits.

| Particulars | 2017-18 | | | |
|---|---|---|---|---|
| | Balance as at 31.03.2017 | Recognised in Profit & loss | Recognised in Other Comprehensive Income | Balance as at 31.03.2018 |
| **Breakup of deferred tax liabilities (net):** | | | | |
| Allowance for doubtful receivables and advances | (17.74) | (7.44) | - | (25.18) |
| Voluntary retirement scheme payments | (0.43) | (0.21) | - | (0.64) |
| Expenses allowed on payment basis | (44.83) | (4.29) | - | (49.12) |
| Principal portion of finance lease rentals | (1.69) | (0.27) | - | (1.96) |
| Accelerated depreciation for tax purposes | 405.34 | (67.65) | - | 337.69 |
| | **340.65** | **(79.86)** | - | **260.79** |

| Particulars | 2016-17 | | | |
|---|---|---|---|---|
| | Balance as at 31.03.2016 | Recognised in Profit & loss | Recognised in Other Comprehensive Income | Balance as at 31.03.2017 |
| **Breakup of deferred tax liabilities (net):** | | | | |
| Allowance for doubtful receivables and advances | (34.13) | 16.39 | - | (17.74) |
| Voluntary retirement scheme payments | (0.37) | (0.06) | - | (0.43) |
| Expenses allowed on payment basis | (39.90) | (4.93) | - | (44.83) |
| Principal portion of finance lease rentals | (1.02) | (0.67) | - | (1.69) |
| Accelerated depreciation for tax purposes | 454.24 | (48.90) | - | 405.34 |
| | **378.82** | **(38.17)** | - | **340.65** |

(in Indian Rupees million, unless otherwise stated)

## 17. Trade payables

| Particulars | As at | |
|---|---|---|
| | 31.03.2018 | 31.03.2017 |
| Total outstandings due to micro and small enterprises - Refer Note: 32 | 15.46 | 16.62 |
| Other Trade payables | 1653.20 | 1322.74 |
| | **1668.66** | **1339.36** |

**a.** Trade payables are non-interest bearing and are normally settled as per due dates generally ranging from 30 to 60 days.

**b.** The Company has financial risk management policies in place to ensure that all payables are paid within the agreed credit terms.

**c.** Dues to Micro and Small enterprises have been determined to the extent such parties have been identified on the basis of the information collected by the Management. This has been relied upon by the auditors.

## 18. Other financial liabilities

| Particulars | As at | |
|---|---|---|
| | 31.03.2018 | 31.03.2017 |
| **Secured** | | |
| Current Maturities of Finance lease obligation (Refer Note: 14) | 7.31 | 8.04 |
| **Unsecured** | | |
| Unclaimed and Unpaid dividends **(a)** | 12.76 | 12.21 |
| Remuneration payable to directors | 21.32 | 20.01 |
| Deposits | 41.75 | 34.43 |
| Payable relating to Capital expenditure | 57.38 | 79.86 |
| Other payables | 423.71 | 370.49 |
| | **564.23** | **525.04** |

**(a)** There is no amount which has fallen due as at Balance sheet date to be credited to Investor Education and Protection Fund. The unclaimed dividend portion is kept separately in earmarked bank accounts - Refer Note: 11B

## 19. Other current liabilities

| Particulars | As at | |
|---|---|---|
| | 31.03.2018 | 31.03.2017 |
| Advance from Customers | 36.16 | 33.17 |
| Statutory liabilities | 25.23 | 83.40 |
| | **61.39** | **116.57** |

## 20. Revenue from operations

| Particulars | For the year | |
|---|---|---|
| | 2017-18 | 2016-17 |
| **a. Gross Sales / Income from Operations** | | |
| Sale of products (including Excise duty of ₹260.49 million for the year 2017-18 and ₹1140.86 million for the year 2016-17) - Refer Note: 29 "Segment Disclosure" for breakup of sales | 15656.70 | 14865.49 |
| Sale of services / Income from Contracts | 117.55 | 103.15 |
| | **15774.25** | **14968.64** |
| **b. Other operating income:** | | |
| Service income | 69.28 | 65.33 |
| Scrap Sales | 57.08 | 66.39 |
| Miscellaneous income | | |
| - Export benefits | 109.99 | 77.82 |
| - Royalty income | 4.06 | 3.74 |
| - Others | 8.16 | 15.85 |
| | **248.57** | **229.13** |
| **Total Revenue from operations (a + b)** | **16022.82** | **15197.77** |

(in Indian Rupees million, unless otherwise stated)

Gross Sales/Income from operations reported above are exclusive of excise duty effective from July 01, 2017 due to implementation of Goods and Service Tax. The comparative figures excluding excise duty is summarised below:

| Particulars | For the year | |
|---|---|---|
| | 2017-18 | 2016-17 |
| Gross Sales / Income from Operations (inclusive of excise duty) | 15774.25 | 14968.64 |
| Less: Excise duty on Sales | 260.49 | 1140.86 |
| **Gross Sales / Income from Operations (exclusive of excise duty)** | **15513.76** | **13827.78** |

## 21. Other Income

| Particulars | For the year | |
|---|---|---|
| | 2017-18 | 2016-17 |
| **(a) Dividend Income** | | |
| Dividend Income from Non-Current Investments | | |
| Dividend from Subsidiaries | 157.35 | 111.26 |
| Dividend from Joint ventures | 101.54 | 172.39 |
| Dividend from Associate | 19.93 | 19.93 |
| Dividend from Others | 0.03 | 0.03 |
| Dividend Income from Current Investments | 6.49 | 17.64 |
| | **285.34** | **321.25** |
| **(b) Interest Income earned on financial assets that are not designated as fair value through profit or loss [FVTPL]** | | |
| from bank deposits (at amortised cost) | 0.64 | 0.42 |
| from other financial assets carried (at amortised cost) | 4.35 | 4.98 |
| | **4.99** | **5.40** |
| **(c) Net gain/(loss) arising on financial assets mandatorily measured at fair value through profit or loss [FVTPL] - (Refer Note: 6D(ii) & 6D(iii))** | **0.78** | **0.75** |
| **(d) Other Non operating income** | | |
| Profit on sale of assets | 4.48 | 0.64 |
| Reversal of allowance for doubtful receivables and advances | 10.41 | 9.65 |
| Provision for expenses no longer required written back | 2.94 | 3.73 |
| Rental income | 1.43 | 1.83 |
| | **19.26** | **15.85** |
| **Total Other Income (a + b + c + d)** | **310.37** | **343.25** |

## 22. Changes in inventories of finished goods, stock-in-trade and work in progress

| Particulars | For the year | |
|---|---|---|
| | 2017-18 | 2016-17 |
| **Opening stock** | | |
| Work-in-progress | 601.45 | 631.70 |
| Stock-in-trade | 161.70 | 182.30 |
| Finished goods | 583.97 | 545.08 |
| **(A)** | **1347.12** | **1359.08** |
| Less: Closing stock | | |
| Work-in-progress | 620.17 | 601.45 |
| Stock-in-trade (including in transit) | 147.56 | 161.70 |
| Finished goods | 441.63 | 583.97 |
| **(B)** | **1209.36** | **1347.12** |
| **Decretion / (Accretion) to stock (A) - (B)** | **137.76** | **11.96** |

(in Indian Rupees million, unless otherwise stated)

## 23. Employee benefits expense

| Particulars | For the year | |
|---|---|---|
| | 2017-18 | 2016-17 |
| Salaries, wages and bonus | 1279.90 | 1114.48 |
| Contribution to provident and other funds | 138.80 | 124.34 |
| Voluntary retirement compensation | 1.35 | 0.90 |
| Share based payments to employees (ESOPs) - Refer Note: 36 | 14.76 | 4.31 |
| Remuneration to Managing Director | 22.43 | 19.99 |
| Welfare expenses | 284.72 | 268.69 |
| | **1741.96** | **1532.71** |
| **Remuneration to Managing Director includes:** | | |
| Salaries & Allowances | 13.67 | 12.22 |
| Incentive * | 5.72 | 5.19 |
| Contribution to provident and other funds | 3.04 | 2.58 |
| (excludes gratuity, compensated absences and share based payments since employee-wise valuation is not available) | | |
| | **22.43** | **19.99** |
| **Value of perquisites (included under appropriate heads of accounts)** | **0.03** | **0.03** |

* Incentive to Managing Director is provisional and subject to determination by the Nomination and Remuneration Committee.

## 24. Finance costs

| Particulars | For the year | |
|---|---|---|
| | 2017-18 | 2016-17 |
| Interest costs | | |
| - on Fixed loans | 1.14 | 70.98 |
| - on Others | 7.86 | 9.78 |
| Other borrowing costs | 5.67 | 6.84 |
| | **14.67** | **87.60** |

## 25. Depreciation and amortisation expense

| Particulars | For the year | |
|---|---|---|
| | 2017-18 | 2016-17 |
| Depreciation of property, plant and equipment - Refer Note: 4A | 705.02 | 635.36 |
| Amortisation of intangible assets - Refer Note: 5A | 33.86 | 34.00 |
| | **738.88** | **669.36** |

(in Indian Rupees million, unless otherwise stated)

## 26. Other expenses

| Particulars | For the year | |
|---|---|---|
| | 2017-18 | 2016-17 |
| Consumption of stores and spares **(a)** | 682.89 | 630.46 |
| Power and fuel **(b)** | 1623.69 | 1298.08 |
| Rent | 50.10 | 42.26 |
| Excise duty on stock differential **(c)** | (62.86) | 7.07 |
| Rates and taxes | 51.35 | 76.75 |
| Insurance | 19.84 | 19.54 |
| Repairs to: **(d)** | | |
| - Buildings | 21.60 | 32.85 |
| - Machinery | 474.68 | 431.11 |
| Directors' Sitting fees (refer Corporate Governance report) | 1.94 | 1.56 |
| Commission to Non-wholetime Directors (refer Corporate Governance report) | 15.60 | 14.82 |
| Auditors' remuneration (Refer Note: 39) | 6.30 | 6.79 |
| Travel and conveyance | 168.89 | 166.34 |
| Freight, delivery and shipping charges | 442.79 | 395.00 |
| Impairment loss on financial assets | - | 55.96 |
| Less: Provision adjusted | - | (55.96) |
| Allowance for doubtful receivables and advances | 31.21 | 18.22 |
| Selling commission | 41.88 | 46.37 |
| Advertisement and publicity | 37.97 | 59.74 |
| Printing, stationery and communication | 44.18 | 48.16 |
| Loss on exchange fluctuation (net) | 1.60 | 29.33 |
| Professional fees | 68.09 | 74.06 |
| Services outsourced | 1009.26 | 914.06 |
| Loss on sale of assets | 7.65 | 3.76 |
| Miscellaneous expenses | 143.43 | 136.28 |
| | **4882.08** | **4452.61** |

**(a)** Includes consumption of packing materials amounting ₹372.59 million (previous year ₹313.93 million)

**(b)** Net of own power generation, which includes energy banked with Kerala State Electricity Board - ₹ NIL (Previous year ₹74.61 million) - Refer Note: 8B

**(c)** Represents the excise duty differential on finished stocks; Consequent to implementation of Goods and Service tax, no excise duty is applicable on the closing stock of current year.

**(d)** Repairs includes consumption of stores and spares amounting to ₹280.83 million (Previous year: ₹246.38 million)

## 27. Income tax expense

| Particulars | For the year | |
|---|---|---|
| | 2017-18 | 2016-17 |
| **A. Income tax expense recognised in Profit and loss:** | | |
| **a. Current tax** | | |
| In respect of the current year | 697.00 | 527.50 |
| | **697.00** | **527.50** |
| **b. Deferred tax** | | |
| In respect of the current year | (80.17) | (38.17) |
| Adjustment to deferred tax attributable to changes in tax rates and laws | 0.31 | - |
| | **(79.86)** | **(38.17)** |
| **Total Income tax expense recognised during the year (net)** | **617.14** | **489.33** |

(in Indian Rupees million, unless otherwise stated)

**Income tax reconciliation**

| Particulars | For the year | |
|---|---|---|
| | **2017-18** | **2016-17** |
| **Profit before tax** | 2051.93 | 1707.08 |
| Income tax expense calculated at the applicable tax rate of 34.608% on Profit before tax | 710.13 | 590.79 |
| Tax expenses recognised during the year | 617.14 | 489.33 |
| **Differential tax impact** | **(92.99)** | **(101.46)** |
| **Differential tax impact due to the following (tax benefit)/tax expenses** | | |
| Exempted Dividend income - Net of disallowance | (71.74) | (86.56) |
| Dividend Income from Overseas Subsidiaries - Taxable at special rates | (8.62) | (7.89) |
| Expenditure on Corporate Social Responsibility not eligible for tax deduction | 4.46 | 4.40 |
| Claim of weighted benefit relating to In-house Research & Development facilities | (16.33) | (17.76) |
| Movement in the fair valuation of the quoted Investment | (0.28) | (0.26) |
| Area based tax incentives | - | (7.12) |
| Donations not allowable | 2.28 | 2.06 |
| Depreciation and amortisation not allowable under Income tax provisions | (10.69) | 6.83 |
| Effect of changes in tax rate | 0.31 | - |
| Share based payments not eligible for tax deduction | 5.36 | 1.49 |
| Others | 2.26 | 3.35 |
| | **(92.99)** | **(101.46)** |
| **B. Income tax expense recognised in Other Comprehensive Income:** | **-** | **-** |

## 28. Earnings per share

| Particulars | For the year | |
|---|---|---|
| | **2017-18** | **2016-17** |
| Basic earnings per share (₹) | 7.60 | 6.46 |
| Diluted earnings per share (₹) | 7.58 | 6.44 |
| The calculation of Basic and Diluted Earnings per share is based on the following data: | | |
| Profits for the year after tax | 1434.79 | 1217.75 |
| Weighted average number of equity shares outstanding during the year: | | |
| - Basic | 188,783,979 | 188,513,561 |
| - Dilutive | 189,356,441 | 189,030,648 |

The weighted average number of equity shares: for the purpose of diluted earnings per share reconciles with the basic earnings per share as given below:

| Particulars | For the year | |
|---|---|---|
| | **2017-18** | **2016-17** |
| Weighted average number of equity shares used in the calculation of basic earnings per share | 188,783,979 | 188,513,561 |
| Shares deemed to be issued for no consideration in respect of: | | |
| - Employee Stock Option Scheme/Plan | 572,462 | 517,087 |
| Weighted average number of equity shares used in the calculation of diluted earnings per share | 189,356,441 | 189,030,648 |

## 29. Segment information

Carborundum Universal Limited provides solutions for following industrial manufacturing needs by developing, manufacturing and marketing products using the properties of materials known as electrominerals:

- Surface engineering (material removal, cutting, polishing) known as Abrasives. This segment comprise of Bonded, Coated, Processed cloth, Polymers, Power tools and Coolants.
- Technical ceramics and super refractory solutions to address wear protection, corrosion resistance, electrical resistance, heat protection and ballistic protection known as Ceramics.
- Electrominerals for surface engineering, refractories, energy and environment. It includes fused alumina, silicon carbide, zirconia, specialty minerals and captive power generation from hydel power plant.

The Business Group Management Committee headed by Managing director (CODM) consisting of Chief Financial Officer, Leaders of Strategic Business Units and Human resources have identified the above three reportable business segments. It reviews and monitors the operating results of the business segments for the purpose of making decisions about resource allocation and performance assessment using profit or loss and return on capital employed.

(in Indian Rupees million, unless otherwise stated)

₹ million

| Particulars | Abrasives | | Ceramics | | Electrominerals | | Eliminations | | Total | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 2017-18 | 2016-17 | 2017-18 | 2016-17 | 2017-18 | 2016-17 | 2017-18 | 2016-17 | 2017-18 | 2016-17 |
| **Sales** | | | | | | | | | | |
| External Sales - Gross | **8628.49** | **8583.69** | **3911.32** | **3778.98** | **3116.89** | **2502.82** | - | - | **15656.70** | **14865.49** |
| Income from Contracts | - | - | 117.55 | 103.15 | - | - | - | - | 117.55 | 103.15 |
| Inter segment sales | 7.43 | 8.00 | 27.16 | 16.44 | 989.91 | 893.19 | (1024.50) | (917.63) | - | - |
| **Gross Sales / Income from Operations** | **8635.92** | **8591.69** | **4056.03** | **3898.57** | **4106.80** | **3396.01** | **(1024.50)** | **(917.63)** | **15774.25** | **14968.64** |
| **Results** | | | | | | | | | | |
| Segment result - EBITDA | 1467.10 | 1281.52 | 801.80 | 766.69 | 551.75 | 376.78 | - | - | 2820.65 | 2424.99 |
| Depreciation/amortisation | (240.37) | (232.99) | (256.79) | (257.87) | (227.24) | (163.81) | - | - | (724.40) | (654.67) |
| Profit on sale of Fixed Assets (Net) | (1.57) | (1.68) | (3.38) | (0.21) | 0.68 | (1.40) | - | - | (4.27) | (3.29) |
| Unallocated corporate expenses/ (Income) | | | | | | | | | (316.49) | (299.75) |
| Interest expense | | | | | | | | | (14.67) | (87.60) |
| Interest and dividend income | | | | | | | | | 290.33 | 326.65 |
| Fair valuation of Investment | | | | | | | | | 0.78 | 0.75 |
| **Profit before tax** | **1225.16** | **1046.85** | **541.63** | **508.61** | **325.19** | **211.57** | **-** | **-** | **2051.93** | **1707.08** |
| Income taxes | | | | | | | | | (617.14) | (489.33) |
| **Net profit after taxes** | | | | | | | | | **1434.79** | **1217.75** |
| **Other information:** | | | | | | | | | | |
| Segment assets | 4431.68 | 4096.20 | 3433.11 | 3255.51 | 3063.48 | 2974.53 | - | - | 10928.27 | 10326.24 |
| Unallocated corporate assets | | | | | | | | | 3430.33 | 2646.92 |
| **Total assets** | **4431.68** | **4096.20** | **3433.11** | **3255.51** | **3063.48** | **2974.53** | - | - | **14358.60** | **12973.16** |
| Segment liabilities | 1078.07 | 973.85 | 449.30 | 435.73 | 667.01 | 486.17 | - | - | 2194.38 | 1895.75 |
| Unallocated corporate liabilities | | | | | | | | | 467.52 | 527.11 |
| **Total liabilities** | **1078.07** | **973.85** | **449.30** | **435.73** | **667.01** | **486.17** | - | - | **2661.90** | **2422.86** |
| Addition to Non - Current assets | 234.11 | 207.92 | 193.81 | 240.35 | 128.06 | 312.20 | | | | |
| Depreciation & Amortization | 240.37 | 232.99 | 256.79 | 257.87 | 227.24 | 163.81 | | | | |
| Impairment losses | 19.70 | 7.31 | 7.88 | 8.77 | 3.63 | 2.14 | | | | |

Sales between operating segments are carried out at arm's length basis and are eliminated at entity level consolidation.

The accounting policies of the reportable segments are the same as that of Company's accounting policies described in Note: 3.22; Segment profit represents the profit before tax earned by each segment without allocation of central administration costs and directors' salaries, other income, as well as finance costs. This is the measure reported to the chief operating decision maker for the purposes of resource allocation and assessment of segment performance.

(in Indian Rupees million, unless otherwise stated)

**Segment assets and liabilities:**

For the purposes of monitoring segment performance and allocating resources between segments:

1. All assets other than investments, loans, current and deferred tax assets, unallocable current and non-current assets, are allocated to reportable segments.
2. All liabilities other than borrowings, current and deferred tax liabilities, and unallocable current and non-current liabilities, are allocated to reportable segments.

**Geographical information:**

The Company is domiciled in India. The amount of its revenue from external customers is broken down by location of the customers and information about its non-current assets other than financial instruments, deferred tax assets, post employment benefit asset and right arising from insurance contracts by location are detailed below:

| Particulars | Sales from external customers | | Non-current assets | |
|---|---|---|---|---|
| | For the year | | As at | |
| | 2017-18 | 2016-17 | 31.03.2018 | 31.03.2017 |
| India | 12200.72 | 11832.35 | 4638.57 | 4824.46 |
| Rest of the world | 3573.53 | 3136.29 | - | - |
| | 15774.25 | 14968.64 | 4638.57 | 4824.46 |

**Information about major customers:**

No single customer contributed 10% or more to the Company's revenue during the years 2017-18 and 2016-17.

Gross Sales/Income from operations reported above are exclusive of excise duty effective from July 01, 2017 due to implementation of Goods and Service Tax. The comparative figures excluding excise duty is summarised below:

| Particulars | Abrasives | | Ceramics | | Electrominerals | | Eliminations | | Total | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 2017-18 | 2016-17 | 2017-18 | 2016-17 | 2017-18 | 2016-17 | 2017-18 | 2016-17 | 2017-18 | 2016-17 |
| Gross Sales/Income from Operations (inclusive of excise duty) | 8635.92 | 8591.69 | 4056.03 | 3898.57 | 4106.80 | 3396.01 | (1024.50) | (917.63) | 15774.25 | 14968.64 |
| Less: Excise duty on Sales | (165.59) | (725.91) | (42.70) | (210.40) | (52.20) | (204.55) | - | - | (260.49) | (1140.86) |
| Gross Sales/Income from Operations (exclusive of excise duty) | 8470.33 | 7865.78 | 4013.33 | 3688.17 | 4054.60 | 3191.46 | (1024.50) | (917.63) | 15513.76 | 13827.78 |

## 30. Contingent Liabilities and commitments:

| Particulars | As at 31.03.2018 | As at 31.03.2017 |
|---|---|---|
| **A. Contingent Liabilities** | | |
| a. No provision is considered necessary for disputed income tax, sales tax, service tax, excise duty and customs duty demand which are under various stages of appeal proceedings as given below: | | |
| i. Income Tax Act, 1961 | 223.53 | 196.52 |
| ii. Central Sales Tax Act,1956 & Local Sales Tax laws of various states | 19.80 | 8.67 |
| iii. Central Excise Act,1944 | 12.20 | 4.83 |
| iv. Service Tax | 1.00 | 2.88 |
| b. Outstanding guarantees given on behalf of subsidiaries | 1726.64 | 1691.08 |
| c. Outstanding letters of credit | 217.63 | 88.01 |
| d. Claims against the Company not acknowledged as debts | | |
| i. Electricity tax | 3.92 | 3.92 |
| ii. Stamp duty | 1.90 | 1.90 |
| iii. Claim filed by ship liner towards damages | 14.00 | 14.00 |
| iv. Claim filed before Consumer Dispute Redressal Forum / Civil Court | 0.61 | 1.61 |
| v. Mining Royalty | - | 42.80 |
| vi. Additional Electricity Deposit Demand - Tamil Nadu Electricity Board | 3.00 | 3.00 |
| vii. Demand charges - TANGEDCO | 1.39 | 1.39 |
| viii. Contribution to District Mineral Foundation under Mines and Minerals (Development and Regulation), Act | 22.76 | 22.76 |
| | **47.58** | **91.38** |

(in Indian Rupees million, unless otherwise stated)

| Particulars | As at 31.03.2018 | As at 31.03.2017 |
|---|---|---|
| e. Employees demands pending before Labour Courts - quantum not ascertainable at present | | |
| In respect of the above demands disputed by the Company, appeals filed are pending before respective appellate authorities. Outflows, if any, arising out of these claims would depend on the outcome of the decision of the appellate authorities and the Company's rights for future appeals. No reimbursements are expected. | | |
| **B. Commitments:** | | |
| Estimated amount of contracts remaining to be executed (net of advances): | | |
| - Towards capital account | 123.38 | 148.30 |

## 31. The following pre-commissioning expenses incurred during the year on various projects have been included in Fixed Assets/Capital Work in Progress:

| Particulars | For the year | |
|---|---|---|
| | 2017-18 | 2016-17 |
| **Account Head:** | | |
| Cost of materials consumed | 3.23 | 4.94 |
| Consumption of Stores and Spares | 0.45 | 4.31 |
| Salary, Wages and Bonus | 7.43 | 9.43 |
| Power and Fuel | 16.77 | 12.51 |
| Rent | 0.24 | - |
| Equipment Hire Charges | - | 1.27 |
| Travel and Conveyance | 0.34 | 1.72 |
| Freight, Delivery and Shipping charges | 0.42 | 43.25 |
| Rates and Taxes | 1.05 | 0.66 |
| Professional Fees | 0.49 | 1.17 |
| Miscellaneous Expenses | 1.18 | 2.69 |
| | **31.60** | **81.95** |

## 32. Disclosures required under Section 22 of the Micro, Small and Medium Enterprises Development Act,2006

| Particulars | As at 31.03.2018 | As at 31.03.2017 |
|---|---|---|
| (i) Principal amount remaining unpaid to suppliers (Refer Note: 17 )<br>Dues to Micro and Small Enterprises have been determined to the extent such parties have been identified on the basis of information collected by the Management. This has been relied upon by the auditors. There were no overdue amounts / interest payable to Micro and small enterprises as per Micro, Small and Medium Enterprises Development Act, 2006 as at the Balance Sheet date or any time during the year. | 15.46 | 16.62 |

## 33. Employee Benefits:

**a. Defined contribution plans:**

The Company operates defined contribution retirement benefit plans for all qualifying employees. The assets of the plans are held separately from those of the Company in funds under the control of trustees. When employees leave the plans prior to full vesting of the contributions, the contributions payable by the Company are reduced by the amount of forfeited contributions.

| Particulars | For the year | |
|---|---|---|
| | 2017-18 | 2016-17 |
| Contribution to Provident fund and Other funds recognised in Profit and Loss for the year | 113.44 | 102.09 |
| Amounts outstanding as at the end of the respective year and paid subsequently | 13.65 | 12.39 |

(in Indian Rupees million, unless otherwise stated)

**b. Defined benefit plans:**

The Company sponsors funded defined benefit plans for employees. Under the plans, the employees are entitled to post-retirement benefits by way of gratuity amounting to 57.69% of last drawn salary for each year of completed service until the retirement age of 58. The defined benefit plans are administered by separate funds, independent of the Company.

**These plans typically expose the Company to actuarial risks such as: Investment, Interest rate, longevity and salary risk:**

i) **Investment risk:** The present value of the defined benefit obligation is calculated using a discount rate which is determined by reference to market yields at the end of the reporting period on government bonds.

ii) **Interest risk:** A decrease in the bond interest rate will increase the plan liability; however, this will be partially offset by an increase in the return on the plan's debt investments.

iii) **Longevity risk:** The present value of the defined benefit obligation is calculated by reference to the best estimate of the mortality of plan participants during their employment. An increase in the life expectancy of the plan participants will increase the plan's liability.

iv) **Salary escalation risk:** The present value of the defined benefit plan liability is calculated by reference to the future salaries of plan participants. As such, an increase in the salary of the plan participants will increase the plan's liability.

The actuarial valuation of the plan assets and the present value of the defined benefit obligation were carried out as at March 31, 2018 by a certified actuary of the Institute of Actuaries of India. The present value of the defined benefit obligation, and the related current service cost and past service cost, were measured using the projected unit credit method.

No other post-retirement benefits are provided to the employees. In respect of the contribution made to provident funds, the employer guarantees the interest notified by the appropriate authority and to the extent of interest rate guaranteed, the liability is considered as defined benefit. For the financial year ended March 31, 2018, the interest yield is adequate to meet the guaranteed interest.

**Assumptions:**

The principal assumptions used for the purposes of the actuarial valuations are given below:

| Particulars | As at 31.03.2018 | As at 31.03.2017 |
|---|---|---|
| Discount rate | 8.00% | 7.25% |
| Expected rate of return | 8.00% | 7.25% |
| Expected salary increment | 5% | 5% |
| Attrition rate | 2% | 2% |
| Mortality table used | Indian Assured Lives Mortality (2006-08) Ultimate | |

**A. Gratuity**

The details of actuarial valuation in respect of Gratuity liability are given below:

| Particulars | As at 31.03.2018 | As at 31.03.2017 |
|---|---|---|
| i. Projected benefit obligation as at beginning of the year | 271.30 | 240.22 |
| Service cost | 23.44 | 21.45 |
| Interest cost | 18.71 | 18.53 |
| Remeasurement (gain)/ loss: | | |
| Actuarial (gain)/loss arising from experience adjustments | (2.48) | 8.36 |
| Benefits paid | (26.35) | (17.26) |
| **Projected benefit obligation as at end of the year** | **284.62** | **271.30** |
| ii. Fair value of plan assets as at beginning of the year | 224.88 | 218.19 |
| Expected return on plan assets | 16.79 | 17.72 |
| Contributions | 22.30 | 23.20 |
| Benefits paid | (26.35) | (17.25) |
| Remeasurement gain/ (loss): | | |
| Actuarial Gain /(losses) on plan assets | 0.84 | (16.98) |
| **Fair value of plan assets as at end of the year** | **238.46** | **224.88** |
| iii. Amount recognised in the balance sheet: | | |
| Projected benefit obligation as at end of the year | 284.62 | 271.30 |
| Fair value of the plan assets at the end of the year | 238.46 | 224.88 |
| **(Liability) / Asset recognised in the Balance sheet - net** | **(46.16)** | **(46.42)** |

(in Indian Rupees million, unless otherwise stated)

| Particulars | As at 31.03.2018 | As at 31.03.2017 |
|---|---|---|
| iv. Cost of the defined benefit plan for the year: | | |
| Current service cost | 23.44 | 21.45 |
| Interest on obligation | 18.71 | 18.53 |
| Expected return on plan assets | (16.79) | (17.72) |
| **Components of defined benefit cost recognised in the Statement of Profit and Loss** | **25.36** | **22.26** |
| (included in Note: 23 Contribution to Provident and other funds) | | |
| **Remeasurement on the net defined benefit liability:** | | |
| Actuarial (gain)/loss arising from changes in demographic assumptions | (2.48) | 8.36 |
| Actuarial (gain)/loss arising from changes in financial assumptions | (0.84) | 16.98 |
| **Components of defined benefit costs recognised in Other Comprehensive Income** | **(3.32)** | **25.34** |
| **Total cost of the defined benefit plan for the year** | **22.04** | **47.60** |

| v | Experience Adjustment | As at 31.03.2018 | As at 31.03.2017 |
|---|---|---|---|
| | Present value of defined benefit obligation | 284.62 | 271.30 |
| | Fair value of plan assets | 238.46 | 224.88 |
| | Balance sheet (Liability)/ Asset | (46.16) | (46.42) |
| | P & L (Income) / expenses | 25.36 | 22.26 |
| | Experience adjustment on plan liabilities (gain) / loss | (2.48) | 8.36 |
| | Experience adjustment on plan assets gain / (loss) | (0.84) | 16.98 |

In the absence of the relevant information from the actuary, the above details do not include the composition of plan assets and expected return on each category of plan assets.

The actual return on plan assets was ₹16.79 million (for the year ended March 31, 2017: ₹17.72 million).

Sensitivity analysis in respect of the actuarial assumptions used in calculation of defined benefit obligation are given below:

| Particulars | As at | |
|---|---|---|
| | 31.03.2018 | 31.03.2017 |
| Discount rate - 100 basis point higher | (265.76) | (252.49) |
| Discount rate - 100 basis point lower | 305.99 | 292.73 |
| Salary escalation rate - 100 basis point higher | 304.31 | 291.25 |
| Salary escalation rate - 100 basis point lower | (266.87) | (253.30) |
| Life expectancy rate - 100 basis point higher | 289.21 | 274.56 |
| Life expectancy rate - 100 basis point lower | (279.52) | (267.67) |

In the above table, positive figures indicate increase in the liability and negative figures indicate decrease in the liability.

The weighted average duration of the benefit obligation as at March 31, 2018 is 15 years (as at March 31, 2017: 15 years).

The Company expects to make a contribution of ₹46.14 million (as at March 31, 2017: ₹ 46.42 million) to the defined benefit plans during the next financial year.

(in Indian Rupees million, unless otherwise stated)

**B. Provident fund**

The actuary has assessed the calculations of the Interest Rate Guarantees based on the guidance note issued by the Institute of Actuaries of India. The disclosures required under Ind AS 19 is as set out below:

**Fund and plan asset position are as follows:**

| Particulars | As at | |
|---|---|---|
| | 31.03.2018 | 31.03.2017 |
| Plan asset at the end of the year | 1027.54 | 940.82 |
| Present value of benefit obligation at the end of the year | 986.00 | 767.86 |
| Surplus available | 41.54 | 172.96 |
| Asset recognised in the Balance Sheet | Not applicable since a separate trust is maintained | |

The plan assets are primarily invested in Government securities.

Assumptions for present value of interest rate guarantee are as follows:

| Particulars | As at | |
|---|---|---|
| | 31.03.2018 | 31.03.2017 |
| Discount rate | 8.00% | 7.25% |
| Remaining term to maturity of portfolio (years) | 4.76 years | 5.87 years |
| Expected guaranteed rate(%) | 8.55% | 8.65% |
| Attrition rate | 2% | 2% |

## 34. Financial Instruments

**(i) Capital management**

For the purpose of the Company's capital management, capital includes issued equity capital, securities premium and all other equity reserves attributable to the equity holders of the Company. The primary objective of the Company's capital management is to maximise the shareholder value.

The Company's objective when managing capital are to:

- safeguard their ability to continue as a going concern, so that they can continue to provide return for shareholders and benefits for other stakeholders and
- Maintain an optimal capital structure to reduce the weighted average cost of capital.

In order to maintain or adjust the capital structure, the Company may adjust the amount of dividend paid to shareholders, return capital to shareholders, issue new shares, or sell non-core assets to reduce the debt.

**Debt to Equity ratio**

| Particulars | As at | |
|---|---|---|
| | 31.03.2018 | 31.03.2017 |
| Debt | 18.09 | 25.98 |
| Equity | 11696.70 | 10550.30 |
| Debt to Equity ratio | 0.15% | 0.25% |

**Loan covenants:**

No covenants are applicable as of March 31, 2018, since the loans outstanding were only under finance lease.

(in Indian Rupees million, unless otherwise stated)

**(ii) Categories of financial instruments**

| Particulars | As at | |
|---|---|---|
| | 31.03.2018 | 31.03.2017 |
| **A. Financial assets** | | |
| **Measured at fair value through Profit or Loss (FVTPL) - Mandatorily measured:** | | |
| - Equity and other investments | 548.78 | 3.21 |
| **Measured at Amortised cost** | | |
| - Cash and bank balances | 208.43 | 79.26 |
| - Other financial assets | 3423.93 | 2706.31 |
| **Measured at fair value through Other Comprehensive Income (FVTOCI)** | | |
| - Investments in equity instruments designated upon initial recognition | 156.15 | 129.52 |
| **Measured at cost** | | |
| - Investments in Equity instruments in subsidiaries, joint ventures and associate | 2408.43 | 2408.43 |
| **B. Financial liabilities** | | |
| Measured at amortised cost (including trade payable balances) | 2243.67 | 1882.34 |

**(iii) Financial risk management objectives**

The Company's activities expose it to market risk, liquidity risk and credit risk. The table given below explains the sources of risk which the entity is exposed to and how the entity manages the risk.

| Risk | Exposure arising from | Measurement | Management |
|---|---|---|---|
| a. Credit risk | Cash and cash equivalents, trade receivables, derivative financial instruments, financial assets measured at amortised cost | Ageing analysis<br>Credit ratings<br>Financial analysis | Diversification of Short term investments, review of credit limits and credit locks and secured mode of payment |
| b. Market risk:<br>i. Market risk - Foreign exchange | Future commercial transactions<br>Recognised financial assets and liabilities not denominated in Indian rupee (INR) | Cash flow forecasting<br>Sensitivity analysis | Foreign exchange forward contracts |
| ii. Market risk - Interest rate | Long-term borrowings at variable rates | Sensitivity analysis | Market trends, Interest rate swaps |
| iii. Market risk - Price risk | Investment in securities | Sensitivity analysis | Portfolio diversification |
| c. Liquidity risk | Borrowings and other liabilities | Rolling cash flow forecasts | Availability of sanctioned credit lines and borrowing facilities |

The Company's risk management is governed by its policies. The Company's treasury identifies, evaluates and hedges financial risks in close co-ordination with the Company's operating units. The risk management policy of the Company provides written principles for overall risk management covering areas such as foreign exchange risk, interest rate risk, credit risk, use of derivative financial instruments and non-derivative financial instruments and investment of excess liquidity.

**a. Credit risk:**

Credit risk is the risk that counterparty will not meet its obligations under a financial instrument or customer contract, leading to a financial loss. The Company is exposed to credit risk from its operating activities (primarily trade receivables) and from its financing activities, including deposits with banks and financial institutions, foreign exchange transactions and other financial instruments.

**a. (i) Trade receivables**

Customer credit risk is managed by each business unit under the guidance of the credit policy, procedures and control relating to customer credit risk management. Credit quality of a customer is assessed based on financial position, past performance, business/economic conditions, market reputation, expected business etc. Based on this evaluation, credit limit and credit terms are decided. Exposure on customer receivables are regularly monitored and managed through credit lock and release. For export customers, credit insurance is generally taken.

(in Indian Rupees million, unless otherwise stated)

The impairment is based on expected credit loss model considering the historical data and financial position of individual customer at each reporting period. The maximum exposure to credit risk at the reporting date is the carrying value of each class of financial assets disclosed in Note: 10. The Company does not hold any collateral as security.

The Company has low concentration of risk with respect to trade receivables, as its customers are widely spread and belong to diversified industries and operate in largely independent markets.

**a. (ii) Financial Instruments and cash deposits**

Credit risk from balances with banks and financial institutions is managed by the Company's treasury department in accordance with the Company's policy. Investments of surplus funds are made for short-term in liquid funds of rated mutual funds and deposits with banks. The Investment limits are set out per Mutual fund and the value of total fixed deposit in Banks to minimise the concentration risk. Investments are reviewed by the Board of Directors on a quarterly basis.

The Company has no exposure to credit risk relating to these cash deposits as at: March 31, 2018 and March 31, 2017. The Corporate guarantees given by the Company to bankers on behalf of its subsidiaries are duly approved by the Board of Directors and are reviewed on a quarterly basis. The total exposure to corporate guarantees is limited to figures reported in Note: 30A

**b. Market risk**

Market risk is the risk that the fair value of future cash flows of a financial instrument will fluctuate because of changes in market prices. Market risk comprises of three types of risks: interest rate risk, currency risk and other price risk, such as equity price risk and commodity risk. Financial instruments affected by market risk include loans and borrowings, deposits, Investments (FVTOCI) and derivative financial instruments.

Market risk exposures are measured using sensitivity analysis. There has been no change in the measurement and management of the Company's exposure to market risks.

**b. (i) Foreign currency risk management**

Foreign currency risk is the risk that the fair value or future cash flows of an exposure will fluctuate because of changes in foreign exchange rates. Foreign exchange rate exposures are managed within policy parameters approved by Board of Directors. The Company manages its foreign currency risk by hedging transactions that are expected to occur within a maximum of 12 month period of forecasted receipts and payments. When a derivative is entered into for the purpose of hedging, the Company negotiates the terms of those derivatives to match with the terms of the hedged exposure. The Company hedges around 50% of the net material exposure by currency. Exposures relating to capital expenditure beyond a threshold are hedged as per Company policy at the time of commitment.

The carrying amounts of the Company's foreign currency denominated monetary assets and monetary liabilities based on gross exposure at the end of the reporting period is as under:

| Currency | Liabilities as at | | Assets as at | |
|---|---|---|---|---|
| | 31.03.2018 | 31.03.2017 | 31.03.2018 | 31.03.2017 |
| US Dollar (USD) | 194.13 | 162.17 | 674.87 | 543.62 |
| Euro (EUR) | 194.06 | 23.79 | 300.16 | 126.12 |
| Great British Pound (GBP) | 0.07 | 0.61 | 1.34 | 5.04 |
| Swedish Krona (SEK) | 2.88 | - | - | - |

## Foreign currency sensitivity analysis

The Company is mainly exposed to US Dollar. The following table provides the sensitivity impact to a 10% strengthening or weakening of Indian rupee exchange rate against foreign currencies. The sensitivity analysis is done on net exposures. A positive number below indicates an increase in profit or equity when the Rupee weakens against the foreign currency and when net exposure is an asset.

| Currency impact in (₹ million) relating to the foreign currencies of: | As at 31.03.2018 | | As at 31.03.2017 | |
|---|---|---|---|---|
| | Profit or loss | Equity | Profit or loss | Equity |
| US Dollar (USD) | 48.07 | 48.07 | 38.15 | 38.15 |
| EURO (EUR) | 10.61 | 10.61 | 10.23 | 10.23 |
| Great Britain Pound (GBP) | 0.13 | 0.13 | 0.44 | 0.44 |
| Swedish Krona (SEK) | (0.29) | (0.29) | - | - |
| **Total** | **58.52** | **58.52** | **48.82** | **48.82** |

The Company's sensitivity impact to foreign currency has increased during the current year end mainly due to the increase in quantum of exposure.

(in Indian Rupees million, unless otherwise stated)

**b (ii) Interest rate risk Management**

Interest rate risk is the risk that the fair value of future cash flows of a financial instrument will fluctuate because of changes in market interest rates.

The Company has been availing the borrowings on a fixed and variable rate of interest. These borrowings are carried at amortised cost. The borrowings on a fixed rate of interest basis are not subject to the interest rate risk as defined in Ind AS 107, since neither the carrying amount nor future cash flows will fluctuate because of change in market interest rates. The borrowings on a variable rate of interest are subject to interest rate risk as defined in Ind AS 107. The Company at the end of March 2018, does not carry any loans with variable interest.

| Classification of borrowings by nature of interest rate | As at | |
|---|---|---|
| | 31.03.2018 | 31.03.2017 |
| Borrowings at variable interest rate | | |
| - Non - Current | - | - |
| - Current | - | - |
| Borrowings at fixed interest rate | | |
| - Non - Current | 10.78 | 17.94 |
| - Current | 7.31 | 8.04 |
| **Total Borrowings** | **18.09** | **25.98** |

Since there are no non-current borrowings on variable interest rate as on 31st March 2018 & 2017, interest rate exposure is Nil.

**b (iii) Price risks**

The Company is exposed to equity price risks arising from equity investments. Certain of the Company's equity investments are held for strategic rather than trading purposes. The Company also holds certain other equity investments for trading purposes.

**Equity price sensitivity analysis**

The accumulated fair value change recognised on equity investment which are held for strategic purpose and designated at Fair value through other comprehensive income as at 31st March 2018 is ₹84.42 million (31st March 2017: ₹57.79 million) - Refer Note no: 13. The sensitivity analysis below have been determined based on the exposure to equity price risks at the end of the reporting periods. If equity prices moves-up or decrease by 5%, the impact to other comprehensive income and equity is given below:

| Movement of equity price | Impact to Other Comprehensive income / Equity | |
|---|---|---|
| | As at March 31, 2018 | As at March 31, 2017 |
| Increase by 5% | 7.24 | 5.91 |
| Decrease by 5% | (7.24) | (5.91) |

The impact of change in equity price on non current investment recorded at Fair value through Profit and Loss and other investment designated as Fair value through Other comprehensive income is not significant.

**c. Liquidity risk management**

The Company's treasury under the guidance of Board of Directors have established an appropriate liquidity risk management framework. The Company manages liquidity risk through cash generation from business and have adequate banking facilities. The Company continuously forecasts and monitors actual cash flows and matches the maturity profiles of financial assets and liabilities.

**Contractual maturities of financial liabilities**

**The table below provides details regarding the contractual maturities of financial liabilities including estimated interest payments as at 31st March 2018:**

| Particulars | Carrying amount | upto 1 year | 1-3 years | 3-5 years | More than 5 years | Total contracted cash flows |
|---|---|---|---|---|---|---|
| Non-current financial liabilities | | | | | | |
| Finance lease liability * | 10.78 | | 8.39 | 3.18 | | 11.57 |

(in Indian Rupees million, unless otherwise stated)

| Particulars | Carrying amount | upto 1 year | 1-3 years | 3-5 years | More than 5 years | Total contracted cash flows |
|---|---|---|---|---|---|---|
| **Current financial liabilities** | | | | | | |
| Trade payables | 1668.66 | 1668.66 | | | | 1668.66 |
| Finance lease liability | 7.31 | 10.45 | | | | 10.45 |
| Other financial liabilities | 556.92 | 556.92 | | | | 556.92 |

**The table below provides details regarding the contractual maturities of financial liabilities including estimated interest payments as at 31st March 2017:**

| Particulars | Carrying amount | upto 1 year | 1-3 years | 3-5 years | More than 5 years | Total contracted cash flows |
|---|---|---|---|---|---|---|
| **Non-current financial liabilities** | | | | | | |
| Finance lease liability * | 17.94 | | 17.33 | 5.42 | | 22.75 |
| **Current financial liabilities** | | | | | | |
| Trade payables | 1339.36 | 1339.36 | | | | 1339.36 |
| Finance lease liability | 8.04 | 11.43 | | | | 11.43 |
| Other financial liabilities | 517.00 | 517.00 | | | | 517.00 |

*Amount included in the above maturity analysis assumes interest outflows based on the actual interest rates.

### Contractual Maturities of Financial Assets

**The table below provides details regarding the contractual maturities of financial assets including estimated interest receipts as at 31st March 2018:**

| Particulars | Carrying amount | upto 1 year | 1-3 years | 3-5 years | More than 5 years | Total contracted cash flows |
|---|---|---|---|---|---|---|
| **Non-current financial assets** | | | | | | |
| Other financial assets | 109.54 | | 42.32 | | 67.22 | 109.54 |
| **Current financial assets** | | | | | | |
| Trade receivables | 3267.44 | 3267.44 | | | | 3267.44 |
| Advance to employees | 9.05 | 9.05 | | | | 9.05 |
| Other financial assets | 37.90 | 37.90 | | | | 37.90 |

**The table below provides details regarding the contractual maturities of financial assets including estimated interest receipts as at 31st March 2017:**

| Particulars | Carrying amount | upto 1 year | 1-3 years | 3-5 years | More than 5 years | Total contracted cash flows |
|---|---|---|---|---|---|---|
| **Non-current financial assets** | | | | | | |
| Other financial assets | 99.87 | | | | 99.87 | 99.87 |
| **Current financial assets** | | | | | | |
| Trade receivables | 2562.84 | 2562.84 | | | | 2562.84 |
| Advance to employees | 9.85 | 9.85 | | | | 9.85 |
| Other financial assets | 33.75 | 33.75 | | | | 33.75 |

(in Indian Rupees million, unless otherwise stated)

The note below sets out details of additional undrawn facilities that the Company has at its disposal to further reduce liquidity risk.

**Financing facilities**

| Particulars | As at | |
|---|---|---|
| | 31.03.2018 | 31.03.2017 |
| Unsecured cash credit and other borrowings facility: | | |
| Amount used | - | - |
| Amount unused | 845.00 | 845.00 |
| | **845.00** | **845.00** |
| Secured cash credit and other borrowings facility: | | |
| Amount used | - | - |
| Amount unused | 1450.00 | 1500.00 |
| | **1450.00** | **1500.00** |
| Total facilities | | |
| Amount used | - | - |
| Amount unused | 2295.00 | 2345.00 |
| | **2295.00** | **2345.00** |

**Fair value measurements**

This note provides information about how the Company determines fair value of various financial assets and financial liabilities.

Fair value of the Company's financial assets and financial liabilities that are measured at fair value on a recurring basis.

Some of the Company's financial assets and financial liabilities are measured at fair value at the end of the reporting period. The following table gives information about how the fair values of these financial assets and financial liabilities are determined (in particular, the valuation techniques and inputs used):

| Financial assets/financial liabilities | Fair Value as at | | Fair value hierarchy | Valuation techniques & key inputs used |
|---|---|---|---|---|
| | 31.03.2018 | 31.03.2017 | | |
| Investments in quoted equity instruments at FVTOCI | 144.85 | 118.22 | Level 1 | Quoted bid price in an active market **(a)** |
| Investments in quoted instruments at FVTPL | 548.60 | 3.03 | Level 1 | Quoted bid price in an active market |
| Investments in unquoted instruments at FVTPL | 0.18 | 0.18 | Level 3 | Fair valuation - **(b)** |
| Investments in unquoted instruments at OCI | 11.30 | 11.30 | Level 3 | Fair valuation - **(b)** |

There were no changes in the fair value hierarchy Levels in the above periods.

a) These investments in equity instruments are not for trading. Instead, they are held for medium or long term strategic purpose. Upon the application of IND AS 109, the Company has chosen to designate these investments in equity instruments as at FVTOCI as the Directors believe that this provides a more meaningful presentation for medium or long term strategic investments, than reflecting changes in fair value immediately in profit or loss.

b) These investments in equity are not significant in value and hence additional disclosures are not presented.

**Fair value of financial assets and financial liabilities that are not measured at fair value (but fair value disclosures are required)**

| Particulars | Fair value hierarchy | As at 31.03.2018 | | As at 31.03.2017 | |
|---|---|---|---|---|---|
| | | Carrying amount | Fair value | Carrying amount | Fair value |
| **Financial assets held at amortised cost:** | | | | | |
| **Non-current financial assets** | | | | | |
| - Other financial assets - Security deposit | Level 3 | 109.54 | 105.61 | 99.87 | 86.15 |
| **Current financial assets** | | | | | |
| - Trade receivables | Level 2 | 3267.44 | 3267.44 | 2562.84 | 2562.84 |
| - Advances to employees | Level 3 | 9.05 | 9.05 | 9.85 | 9.85 |
| - Other advances | Level 3 | 37.90 | 37.90 | 33.75 | 33.75 |
| **Financial liabilities held at amortised cost:** | | | | | |
| **Non-current financial liabilities** | | | | | |
| - Finance lease and interest thereon | Level 2 | 10.78 | 10.78 | 17.94 | 17.94 |
| **Current financial liabilities** | | | | | |
| - Trade payables | Level 2 | 1668.66 | 1668.66 | 1339.36 | 1339.36 |
| - Finance lease and interest thereon | Level 2 | 7.31 | 7.31 | 8.04 | 8.04 |
| - Other financial liabilities | Level 3 | 556.92 | 556.92 | 517.00 | 517.00 |

The fair values of the financial assets and financial liabilities included above have been determined in accordance with generally accepted pricing models based on a discounted cash flow analysis, with the most significant inputs being the discount rate that reflects the credit risk of counterparties.

## 35. Related Party Disclosures

**List of Related Parties**

Related party relationships are as identified by the management and relied upon by the auditors.

**I) Parties where control exists - Subsidiaries**

**Direct Holding:**

| | |
|---|---|
| Net Access India Ltd. | [Net access] |
| Southern Energy Development Corporation Ltd. | [SEDCO] |
| Sterling Abrasives Ltd. | [Sterling] |
| CUMI (Australia) Pty Ltd. | [CAPL] |
| CUMI International Ltd. | [CIL] |

**Holding through Subsidiary:**

| | |
|---|---|
| Volzhsky Abrasives Works | [VAW] |
| Foskor Zirconia (Pty) Ltd. | [Foskor] |
| CUMI America Inc. | [CAI] |
| CUMI Middle East FZE | [CME] |
| CUMI Abrasives & Ceramics Company Ltd. | [CACCL] |
| Thukela Refractories Isithebe Pty Ltd. | [TRIL] |
| CUMI Europe s.r.o | [CE] |

**II) Other related parties with whom transactions have taken place during the year.**

**Joint Ventures**

| | |
|---|---|
| Murugappa Morgan Thermal Ceramics Ltd. | [MMTCL] |
| Ciria India Ltd. | [Ciria] |

**Associate and its subsidiaries**

| | |
|---|---|
| Wendt (India) Ltd. | [Wendt] |

**Subsidiaries of Associate:**

| | |
|---|---|
| Wendt Grinding Technologies Ltd., Thailand | [WGTL] |
| Wendt (Middle East) FZE | [WME] |

**Key Management Personnel**

Mr. K Srinivasan, Managing Director

**Other Related parties**

| | |
|---|---|
| Ambadi Investments Ltd (Shareholder with significant influence) | [AIL] |
| Parry Enterprises India Ltd (Subsidiary of AIL) | [PEIL] |
| Parry Agro industries Ltd (Subsidiary of AIL) | [PAL] |
| Carborundum Universal Employees Provident fund | [CUEPF] |

Retiral funds of Subsidiaries, Joint ventures, Associate and Other Related parties

## Notes forming part of the Standalone Financial Statements for the year ended March 31, 2018
(in Indian Rupees million, unless otherwise stated)

### A. Transactions during FY 2017-18

| Related Party | Income from Sales & Services | Royalty income | Dividend income | Purchase of goods | Purchase of power | Expenditure on other services | Rental Expenses | Managerial remuneration | Commission paid | Purchases of Fixed asset | Contribution to Provident Fund |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Subsidiaries** | | | | | | | | | | | |
| CAI | 296.21 | - | - | 0.15 | - | - | - | - | - | - | - |
| Net Access | 1.46 | - | 20.00 | - | - | 26.44 | - | - | - | - | - |
| Sterling | 135.32 | - | 13.50 | 2.06 | | - | - | - | - | - | - |
| SEDCO | 2.40 | - | 74.08 | - | 185.26 | - | - | - | - | - | - |
| CAPL | 348.83 | 4.05 | 49.77 | - | - | - | - | - | - | - | - |
| CME | 113.02 | - | - | - | - | - | - | - | - | - | - |
| Foskor | 10.58 | - | - | 29.72 | - | - | - | - | - | - | - |
| CACCL | 61.38 | - | - | 73.89 | - | - | - | - | - | - | - |
| VAW | 50.16 | - | - | 507.47 | - | - | - | - | - | - | - |
| CUMI Europe | - | - | - | - | - | - | - | - | 7.01 | - | - |
| **Total** | **1,019.36** | **4.05** | **157.35** | **613.29** | **185.26** | **26.44** | **-** | **-** | **7.01** | **-** | **-** |
| **Joint Ventures** | | | | | | | | | | | |
| MMTCL | 25.54 | - | 71.54 | 8.22 | - | - | - | - | - | 0.14 | - |
| Ciria | 108.38 | - | 30.00 | 1.97 | - | - | - | - | - | - | - |
| **Total** | **133.92** | **-** | **101.54** | **10.19** | **-** | **-** | **-** | **-** | **-** | **0.14** | **-** |
| **Associate & its subsidiaries** | | | | | | | | | | | |
| Wendt | 28.61 | - | 19.93 | 20.36 | - | 0.91 | 1.73 | - | - | 2.28 | - |
| WGTL | 56.41 | - | - | 4.71 | - | - | - | - | - | - | - |
| WME | 2.05 | - | - | - | - | - | - | - | - | - | - |
| **Total** | **87.07** | **-** | **19.93** | **25.07** | **-** | **0.91** | **1.73** | - | - | **2.28** | **-** |
| | | | | | | | | | | | |
| **Other related parties** | | | | | | | | | | | |
| PEIL | - | - | - | - | - | 34.40 | - | - | - | - | - |
| CUEPF | - | - | - | - | - | - | - | - | - | - | 116.80 |
| **Total** | - | - | - | - | - | **34.40** | - | - | - | - | **116.80** |
| **KMP** | - | - | - | - | - | - | - | **22.46** | - | - | - |
| | | | | | | | | | | | |
| **Grand Total** | **1240.35** | **4.05** | **278.82** | **648.55** | **185.26** | **61.75** | **1.73** | **22.46** | **7.01** | **2.42** | **116.80** |

## Notes forming part of the Standalone Financial Statements for the year ended March 31, 2018
(in Indian Rupees million, unless otherwise stated)

### B. Transactions during FY 2016-17

| Related Party | Income from Sales & Services | Royalty income | Dividend income | Reimbursement of employee cost | Purchase of goods | Purchase of power | Expenditure on other services | Rental expense | Managerial remuneration | Commission paid | Purchases of Fixed asset | Investment made | Contribution to Provident Fund |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Subsidiaries** | | | | | | | | | | | | | |
| CAI | 236.00 | - | - | - | 1.14 | - | - | - | - | - | - | - | - |
| Net Access | 1.46 | - | 28.25 | - | - | - | 21.53 | - | - | - | - | 34.00 | - |
| Sterling | 104.22 | - | 10.13 | - | 1.05 | - | - | - | - | - | - | - | - |
| SEDCO | - | - | 27.29 | - | - | 196.91 | - | - | - | - | - | - | - |
| CAPL | 276.86 | 3.74 | 45.59 | - | - | - | - | - | - | - | - | - | - |
| CME | 95.14 | - | - | - | - | - | - | - | - | - | - | - | - |
| Foskor | 6.55 | - | - | - | 6.21 | - | - | - | - | - | 14.49 | - | - |
| CACCL | 57.36 | - | - | - | 112.14 | - | - | - | - | - | 21.87 | - | - |
| VAW | 39.57 | - | - | - | 239.87 | - | - | - | - | - | - | - | - |
| CUMI Europe | | - | - | - | - | - | - | - | - | 9.40 | - | - | - |
| **Total** | **817.16** | **3.74** | **111.26** | **-** | **360.41** | **196.91** | **21.53** | **-** | **-** | **9.40** | **36.36** | **34.00** | **-** |
| **Joint Ventures** | | | | | | | | | | | | | |
| MMTCL | 23.94 | - | 157.39 | - | 9.53 | - | - | - | - | - | - | - | - |
| Ciria | 148.74 | - | 15.00 | - | - | - | - | - | - | - | - | - | - |
| **Total** | **172.68** | **-** | **172.39** | **-** | **9.53** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** |
| **Associate & its subsidiaries** | | | | | | | | | | | | | |
| Wendt | 27.70 | - | 19.93 | 0.06 | 18.66 | - | 2.42 | 1.54 | - | - | - | - | - |
| WGTL | 51.70 | - | - | - | - | - | - | | - | - | - | - | - |
| WME | 2.97 | - | - | - | - | - | - | | - | - | - | - | - |
| **Total** | **82.37** | **-** | **19.93** | **0.06** | **18.66** | **-** | **2.42** | **1.54** | **-** | **-** | **-** | **-** | **-** |
| **Other related parties** | | | | | | | | | | | | | |
| PEIL | - | - | - | - | - | - | 39.68 | | - | - | - | - | - |
| CUEPF | - | - | - | - | - | - | - | | - | - | - | - | 106.26 |
| **Total** | **-** | **-** | **-** | **-** | **-** | **-** | **39.68** | **-** | **-** | **-** | **-** | **-** | **106.26** |
| **KMP** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | | **20.02** | **-** | **-** | **-** | **-** |
| **Grand Total** | **1072.21** | **3.74** | **303.58** | **0.06** | **388.60** | **196.91** | **63.63** | **1.54** | **20.02** | **9.40** | **36.36** | **34.00** | **106.26** |

## Notes forming part of the Standalone Financial Statements for the year ended March 31, 2018

(in Indian Rupees million, unless otherwise stated)

### C. Outstandings

| Related Party | As at 31.03.2018 | | | | As at 31.03.2017 | | | |
|---|---|---|---|---|---|---|---|---|
| | Trade and other receivable | Deposit outstanding | Payables | Letter of comfort / Guarantee outstanding* | Trade and other receivable | Deposit outstanding | Payables | Letter of comfort/ Guarantee outstanding* |
| **Subsidiaries** | | | | | | | | |
| CAI | 165.83 | - | 0.23 | 321.95 | 121.54 | - | 1.19 | 320.95 |
| Net Access | 0.29 | - | 3.91 | - | 0.14 | - | 0.48 | - |
| Sterling | 16.33 | - | 0.16 | - | 12.78 | - | 0.89 | - |
| SEDCO | 0.25 | - | 15.67 | - | - | - | 16.65 | - |
| CAPL | 20.06 | - | - | - | 36.60 | - | - | - |
| CME | 52.59 | - | - | - | 21.60 | - | - | |
| Foskor | - | - | - | 273.00 | - | - | - | 241.94 |
| CIL | - | - | - | 1131.69 | - | - | - | 1128.19 |
| CACCL | 41.29 | - | 6.12 | - | 62.99 | - | 34.28 | - |
| VAW | 3.27 | | 147.71 | - | - | - | 61.50 | - |
| TRIL | - | - | - | - | - | - | - | - |
| CUMI Europe | - | - | - | - | - | - | 0.81 | - |
| **Total** | **299.91** | **-** | **173.80** | **1726.64** | **255.65** | **-** | **115.80** | **1691.08** |
| **Joint Ventures** | | | | | | | | |
| MMTCL | 17.23 | - | 0.38 | - | 0.04 | - | 1.68 | - |
| Ciria | 32.12 | - | 0.22 | - | 8.90 | - | - | - |
| **Total** | **49.35** | **-** | **0.60** | **-** | **8.94** | **-** | **1.68** | **-** |
| **Associate & its subsidiaries** | | | | | | | | |
| Wendt | 26.66 | 1.00 | 1.92 | - | 2.39 | 1.00 | 3.79 | - |
| WGTL | 9.21 | - | 1.17 | | 3.46 | - | - | - |
| WME | 1.05 | - | - | - | 0.96 | - | - | - |
| **Total** | **36.92** | **1.00** | **3.09** | **-** | **6.81** | **1.00** | **3.79** | **-** |
| **Other related parties** | | | | | | | | |
| PEIL | - | - | 1.61 | - | - | - | 1.19 | - |
| CUEPF | - | - | 9.88 | - | - | - | 9.09 | - |
| **Total** | **-** | **-** | **11.49** | **-** | **-** | **-** | **10.28** | **-** |
| **Grand Total** | **386.18** | **1.00** | **188.98** | **1726.64** | **271.40** | **1.00** | **131.55** | **1691.08** |

Transactions with related parties in the nature of sale of goods, rendering of services, purchase of goods, procurement of services are at arm's length price.

* Issued towards availment of banking facilities by the respective entities.

(in Indian Rupees million, unless otherwise stated)

### D. Compensation to Key Management Personnel

The remuneration to Key Management Personnel for the years is given below:

| Particulars | Year ended | |
|---|---|---|
| | 31.03.2018 | 31.03.2017 |
| Short term benefits | 19.39 | 17.41 |
| Post employment benefits | 3.04 | 2.58 |
| Other benefits | 0.03 | 0.03 |
| | **22.46** | **20.02** |

The Remuneration to Key Management Personnel is determined by the Nomination and Remuneration Committee having regard to the performance of individual and market trends.

## 36. Employee Stock Option Scheme/Plan [ESOP]

**A. ESOP Scheme 2007**

a. Pursuant to the approval accorded by shareholders at their Annual General Meeting held on 27th July 2007, the Nomination and Remuneration Committee of the Company formulated 'Carborundum Universal Limited Employee Stock Option Scheme 2007' (ESOP Scheme 2007).

b. Under the Scheme, options not exceeding 4,667,700 were reserved to be issued to the eligible employees, with each option conferring a right upon the employee to apply for one equity share. The options granted under the Scheme would vest as per the following schedule (except Grant V B):

   20% on expiry of one year from the date of grant;

   20% on expiry of two years from the date of grant;

   30% on expiry of three years from the date of grant; and

   30% on expiry of four years from the date of grant.

   The options granted to the employees would be capable of being exercised within a period of three years from the date of the first vesting and six years from the date of the second, third and fourth vesting.

   In respect of Grant V B, 40 per cent of the Options would vest on expiry of one year from the date of grant and 30 per cent each on expiry of 2 and 3 years from the date of grant. The options granted to the employees (Grant V B) can be exercised within a period of three years from the date of the vesting in respect of 50% of the first tranche and six years for the balance 50% of the first tranche and the subsequent tranches from the respective date of vesting.

c. The exercise price of the option is equal to the latest available closing market price of the shares on the stock exchange where there is highest trading volume as on the date prior to the date of the Nomination and Remuneration Committee resolution approving the grant.

d. The vesting of options is linked to continued association with the Company and the employee achieving performance rating parameters.

(in Indian Rupees million, unless otherwise stated)

The details of the grants under the aforesaid scheme are as follows:

| | Grant | I | II | III | IV | V A | V B | VI | VII | VIII |
|---|---|---|---|---|---|---|---|---|---|---|
| | Date of Grant | 29.09.2007 | 28.01.2008 | 30.04.2008 | 24.07.2008 | 27.01.2011 | 27.01.2011 | 30.04.2011 | 05.08.2011 | 04.02.2012 |
| | Exercise Price [₹] | 91.80 | 75.23 | 59.03 | 61.40 | 125.08 | 125.08 | 124.15 | 146.00 | 155.00 |
| | Vesting commences on | 29.09.2008 | 28.01.2009 | 30.04.2009 | 24.07.2009 | 27.01.2012 | 27.01.2012 | 30.04.2012 | 05.08.2012 | 04.02.2013 |
| (i) | Options granted | 2,671,400 | 60,000 | 24,800 | 139,600 | 653,200 | 334,400 | 73,600 | 420,000 | 151,600 |
| (ii) | Options outstanding as on 1.4.2017 | 188,616 | - | - | 3,876 | 322,828 | 161,940 | - | 190,080 | 77,787 |
| (iii) | Options granted during the year | - | - | - | - | - | - | - | - | - |
| (iv) | Options cancelled during the year | - | - | - | - | - | - | - | - | - |
| (v) | Total options vested during the year | - | - | - | - | - | - | - | - | - |
| (vi) | Options exercised during the year | 188,616 | - | - | | 47,372 | 50,524 | - | - | 975 |
| (vii) | Options lapsed during the year | - | - | - | 1,824 | - | - | - | - | - |
| (viii) | Options outstanding as on 31.03.2018 | - | - | - | 2,052 | 275,456 | 111,416 | - | 190,080 | 76,812 |
| | (viii) = (ii) + (iii) - (iv) - (vi) - (vii) | | | | | | | | | |
| The Options under Grant II and III are fully cancelled and hence there is no outstanding as of March 31, 2018. | | | | | | | | | | |
| (ix) | Options vested but not exercised as at 01.04.2017 | 188,616 | - | - | 3,876 | 322,828 | 161,940 | - | 190,080 | 77,787 |
| (x) | Options vested but not exercised as at 31.03.2018 (x) = (ix) + (v) - (vi) - (vii) | - | - | - | 2,052 | 275,456 | 111,416 | - | 190,080 | 76,812 |

e. Contractual Life — The ESOP Scheme 2007, was instituted with the approval of the shareholders on 27th July 2007 and the first grant was made on 29th September 2007.

No further grants is proposed to be made under the ESOP Scheme 2007. However, options granted under the same which are pending to be exercised will continue to be administered by the Company.

f. The fair value of options based on the valuation of the independent valuer as of the respective dates of grant / modification are given below:

| Grant | Fair value as per Black Scholes options pricing formula [₹] | Incremental Fair Value due to the modification of Exercise Period | Exercise Price [₹] |
|---|---|---|---|
| I | 33.56 | 6.09 | 91.80 |
| II | 27.76 | - | 75.23 |
| III | 22.78 | - | 59.03 |
| IV | 24.61 | 3.00 | 61.40 |
| VA | 49.59 | 10.20 | 125.08 |
| VB | 44.27 | 11.75 | 125.08 |
| VI | 45.80 | 10.09 | 124.15 |
| VII | 54.13 | 11.07 | 146.00 |
| VIII | 55.62 | 9.86 | 155.00 |

g. Fair value has been calculated using the Black Scholes Options Pricing Formula and the significant assumptions in this regard are as follows: (weighted average basis)

| | Grant | | | |
|---|---|---|---|---|
| | I & IV | II & III | V A & V B | VI, VII & VIII |
| Risk free Interest rate | 7.38% | - | 8.04% | 8.35% |
| Expected Life (years) | 2.5 to 7.0 | - | 2.5 to 7.0 | 2.5 to 7.0 |
| Expected volatility | 39.93 | - | 39.81 | 37.69 |
| Expected dividend yield | 2.32% | - | 1.29% | 1.60% |

### 36B. ESOP Plan 2016

**A Summary of Status of ESOPs Granted**

The position of the existing scheme is summarized as under

| Sl. No. | Particulars | ESOP 2016 |
|---|---|---|
| **I. Details of the ESOP Plan 2016** | | |
| 1. | Date of Shareholder's Approval | 9th January 2017 |
| 2. | Total Number of Options approved | 3,772,000 |
| 3. | Vesting Requirements | The vesting of options granted, is based on annual performance rating for each financial year and as per following schedule:<br>Grant I & Grant II B:- 20 per cent each on expiry of 1 and 2 years from the date of grant and 30 per cent each on expiry of 3 and 4 years from the date of grant<br>Grant IIA: 25 per cent on expiry of 1 year from the date of grant and 37.5 per cent each on expiry of 2 and 3 years from the date of grant. |
| 4. | The Pricing Formula | The options carry a right to subscribe to equity shares at the latest available closing price on the stock exchange which reports the highest trading volume, prior to the date of grant of the options |
| 5. | Maximum term of Options granted (years) | The Exercise period would commence from the date of vesting and will expire on completion of 5 (five) years from the date of respective vesting. |
| 6. | Method of Settlement | Equity |
| 7. | Source of shares | Primary |
| 8. | Variation in terms of ESOP | No variations |

**II. Options Movement during the year ended 31st March 2018**

| Sl. No. | Particulars | No. of Options | Weighted average exercise Price | Grant I | Grant IIA | Grant IIB |
|---|---|---|---|---|---|---|
| | **Exercise Price per Option (in ₹)** | | | 257.55 | 367.20 | 367.20 |
| 1 | No. of Options Outstanding at the beginning of the year | 914,900 | 257.55 | 914,900 | - | - |
| 2 | Options Granted during the year | 70,214 | 367.20 | - | 19,344 | 50,870 |
| 3 | Options cancelled during the year | 370,400 | 257.55 | 370,400 | - | - |
| 4 | Options Forfeited / Surrendered during the year | - | - | - | - | - |
| 5 | Options Lapsed during the year | - | - | - | - | - |
| 6 | Options Exercised during the year | 10,174 | 257.55 | 10,174 | - | - |
| 7 | Total number of shares arising as a result of exercise of options | 10,174 | - | 10,174 | - | - |
| 8 | Money realised by exercise of options (₹ in million) | 2.62 | NA | 2.62 | | |
| 9 | Number of Options outstanding at the end of the year | 604,540 | 270.29 | 534,326 | 19,344 | 50,870 |
| 10 | Number of Options exercisable at the end of the year | 98,726 | 257.55 | 98,726 | | |

(in Indian Rupees million, unless otherwise stated)

**III. Weighted Average remaining contractual life as on 31st March 2018**

| Range of Exercise Price | No. of Options outstanding | Weighted average contractual life (years) |
|---|---|---|
| 0 to 200 | Nil | NA |
| 201 to 400 | 604,540 | 6.68 |

**IV. Exercise price equals market price Weighted average Fair Value of Options granted during the year ended 31st March 2018 whose:**

| | |
|---|---|
| Exercise price equals market price | 122.58 |
| **V. The weighted average market price of options exercised during the year ended 31st March 2018** | 347.40 |

**VI. Method and Assumptions used to estimate the fair value of options granted during the year ended 31st March 2018:**

The fair value has been calculated using the Black Scholes Option Pricing model.

The Assumptions used in the model are as follows:

| Variables | Weighted Average |
|---|---|
| 1. Risk Free Interest Rate (%) | 7.19 |
| 2. Expected Life(in years) | 3.91 |
| 3. Expected Volatility (%) | 29.21 |
| 4. Dividend Yield (%) | 0.27 |
| 5. Exercise Price | 367.2 |
| 6. Price of the underlying share in market at the time of the option grant (₹) | 367.2 |

**Assumptions:**

Stock Price: Closing price on National Stock Exchange of India Ltd. as on the date prior to the date of the Nomination and Remuneration Committee approving the grant has been considered.

Volatility: The expected price volatility is based on the historic volatility, adjusted for any expected changes to future volatility due to public available information.

Risk-free rate of return: The risk-free interest rate being considered for the calculation is the interest rate applicable for a maturity equal to the expected life of the options based on the zero-coupon yield curve for Government Securities.

Exercise Price: Exercise Price of each specific grant has been considered.

Time to Maturity: Time to Maturity / Expected Life of options is the period for which the Company expects the options to be live.

Expected divided yield: Expected dividend yield has been calculated based on dividend declared prior to date of grant.

**VII. Effect of share-based payment transactions on the entity's Profit or Loss for the period:**

| Particulars | Amount |
|---|---|
| Employee Option plan expense | ₹14.76 million |

(in Indian Rupees million, unless otherwise stated)

## 37. a. Value of Imports on CIF basis

| Particulars | For the year | |
|---|---|---|
| | 2017-18 | 2016-17 |
| Raw materials | 2759.17 | 2234.20 |
| Components & Spare parts | 77.87 | 86.72 |
| Finished goods | 522.42 | 548.20 |
| Capital goods | 140.61 | 425.49 |

## 37. b. Expenditure in foreign currency (on cash basis)

| Particulars | For the year | |
|---|---|---|
| | 2017-18 | 2016-17 |
| Professional / Consultancy fees | 11.18 | 31.12 |
| Commission | 12.75 | 17.05 |
| Interest | - | 0.37 |
| Travel and other matters | 43.19 | 42.59 |

## 38. Earnings in foreign exchange on account of

| Particulars | For the year | |
|---|---|---|
| | 2017-18 | 2016-17 |
| Value of exports on FOB basis | 3497.63 | 3070.64 |
| Royalty | 4.05 | 3.74 |
| Dividend | 49.77 | 45.59 |
| Management fees | 19.44 | 19.61 |

## 39. Auditors' Remuneration

| Particulars | For the year | |
|---|---|---|
| | 2017-18 | 2016-17 |
| Statutory audit | 3.20 | 3.20 |
| Tax Audit | 0.80 | 0.80 |
| Other services | 2.28 | 2.79 |
| Out of pocket expenses | 0.02 | 0.00 |
| | **6.30** | **6.79** |

## 40. Research and Development expenditure

| Particulars | For the year | |
|---|---|---|
| | 2017-18 | 2016-17 |
| **a) Revenue Expenditure (disclosed under the respective heads)** | | |
| Direct Material, Supplies and Consumables | 36.64 | 33.56 |
| Employee Benefit Expenses | 55.80 | 44.12 |
| Repair & Maintenance | 3.04 | 3.40 |
| Other Expenses | 24.35 | 18.60 |
| Depreciation | 11.93 | 10.53 |
| **Total** | **131.76** | **110.21** |
| **b) Capital Expenditure** | | |
| **Property, plant and equipment** | | |
| Buildings | 2.30 | 2.49 |
| Plant & Machinery | 24.21 | 7.11 |
| Furniture & Fixtures | 0.03 | 1.85 |
| | **26.54** | **11.45** |
| **Intangibles** | 0.02 | 2.29 |
| **Total** | **26.56** | **13.74** |

(in Indian Rupees million, unless otherwise stated)

## 41. Details on list of Investments in Subsidiaries, joint ventures and associate as per Ind AS 27

| Particulars | Principal place of business and Incorporation | Proportion of ownership interest | |
|---|---|---|---|
| | | 31.03.2018 | 31.03.2017 |
| **A. Investment in Subsidiaries** | | | |
| CUMI International Ltd., Cyprus | Cyprus | 100% | 100% |
| Sterling Abrasives Ltd. | India | 60% | 60% |
| Southern Energy Development Corporation Ltd. | India | 84.76% | 84.76% |
| Net Access India Ltd. | India | 100% | 100% |
| CUMI Australia Pty Ltd., Australia | Australia | 51.22% | 51.22% |
| | | | |
| **B. Investment in Joint ventures** | | | |
| Murugappa Morgan Thermal Ceramics Ltd. | India | 49.00% | 49.00% |
| Ciria India Ltd. | India | 30% | 30% |
| | | | |
| **C. Investment in Associate** | | | |
| Wendt (India) Ltd. | India | 39.87% | 39.87% |

## 42. Leases

| Particulars | As at | |
|---|---|---|
| | 31.03.2018 | 31.03.2017 |
| The Company has acquired vehicles under finance lease with respective asset as security: | | |
| a. Original cost of Leased Assets | 34.98 | 39.15 |
| Cost as per Fixed Assets Schedule. - Refer Note: 4A | 33.64 | 34.45 |
| b. Net carrying amount - Refer Note: 4A | 12.50 | 21.08 |
| c. Reconciliation between total minimum lease payments and their present value: | | |
| Total minimum lease payments | 22.02 | 34.18 |
| Less: Future liability on interest account | 3.93 | 8.20 |
| Present value of lease payments - Refer Note: 14 | 18.09 | 25.98 |
| d. Yearwise future minimum lease rental payments: | | |

| Particulars | Total Minimum Lease Payments as on 31.03.2018 | Present value of Lease payments as on 31.03.2018 | Total Minimum Lease Payments as on 31.03.2017 | Present value of Lease payments as on 31.03.2017 |
|---|---|---|---|---|
| (i) Not later than one year | 10.45 | 7.31 | 11.43 | 8.04 |
| (ii) Later than one year and not later than three years | 8.39 | 7.81 | 17.33 | 13.27 |
| (iii) Later than three years and not later then five years | 3.18 | 2.97 | 5.42 | 4.67 |
| (iv) Later than five years | - | - | - | - |
| **Total** | **22.02** | **18.09** | **34.18** | **25.98** |

e. The Company has taken certain premises under operating leases cancellable at mutual option. Hence no disclosure in this regard is required.

(in Indian Rupees million, unless otherwise stated)

**43.** Dividend Tax on the Interim Dividend has been paid after availing the credit amounting to ₹18.15 million (Previous year: ₹22.65 million) in respect of the tax paid on the dividends received from three domestic subsidiaries . Dividend tax payable on the proposed final dividend is eligible for set-off of dividend tax credit amounting to ₹13.22 million (Previous year - ₹14.05 million) in respect of dividend tax payable on dividends to be distributed by one domestic subsidiary and an overseas subsidiary based on provision under sub section (1A) of Section 115O of the Income tax Act.

## 44. Corporate Social Responsibility

During the year, the Company incurred an aggregate amount of ₹25.61 million (Previous year: ₹23.41 million) towards corporate social responsibility against the amount of ₹25.31 million (Previous year: ₹21.41 million) to be spent as per provision of Section 135 of the Companies Act, 2013 read with relevant schedule and rules made thereunder.

| The details of the CSR spend is given below: | For the year | |
|---|---|---|
| | 2017-18 | 2016-17 |
| A. Expenditure incurred directly by the Company | | |
| Skill Centre Development - Revenue expenditure | 12.95 | 12.71 |
| | | |
| B. Expenditure incurred through Agencies | | |
| AMM Foundation | 12.66 | 10.70 |
| | **25.61** | **23.41** |

## 45. Disclosure relating to Specified Bank Notes (SBN)

| Particulars | SBN | Other Denomination Notes | Total |
|---|---|---|---|
| Closing Cash in hand as on 08.11.2016 | 0.44 | 0.48 | 0.92 |
| Add: Permitted Receipts | - | 2.69 | 2.69 |
| Deduct: Permitted Payments | - | 2.50 | 2.50 |
| Deduct: Amount deposited in Banks | 0.44 | - | 0.44 |
| **Closing Cash in hand as on 30.12.2016** | - | 0.67 | 0.67 |

## 46. Events after the reporting period:

No significant event is to be reported between the closing date and that of the meeting of Board of directors.

## 47. Applicability of New/amendment on existing Indian Accounting Standards (Ind AS)

During the current year, the following new Ind AS /amendments to existing Ind AS were announced which are becoming effective from next financial year w.e.f. 1st April 2018:

| Standards | Ind AS 115 | Ind AS 21 | Ind AS 12 | Ind AS 40 |
|---|---|---|---|---|
| Title of the new Ind AS/ Amendment to existing Ind AS | Revenue from contracts with customers | Effect of changes in Foreign exchange rate | Income taxes | Investment property |
| The nature of the impending change or changes in accounting policy | The standard replaces Ind AS 18 Revenue and Ind AS 11 Construction contracts and related appendices.<br>A new five-step process must be applied before revenue can be recognised. | The amendment clarifies recognition of advances at the initial rate only. No subsequent reinstatement required. | The amendments clarify the accounting for deferred taxes where an asset is measured at fair value and that fair value is below the asset's tax base. | The amendments clarify that transfers to, or from, investment property can only be made if there has been a change in use that is supported by evidence. |
| The date by which application of the Ind AS is required | Effective from 1st April 2018 | | | |
| The date as at which it plans to apply the Ind AS initially | This will be implemented from the effective date 1st April 2018 as applicable. | | | |
| Impact to the Company | No material impact foreseen | Already practised. Hence no incremental impact | No material impact foreseen | No investment property is held by the Company. |

## 48. Approval of financial statements:

The financial statements were reviewed and recommended by the Audit Committee and has been approved by the Board of Directors at their meeting held on May 04, 2018.

# Notes

# Notes

Concept & Design :
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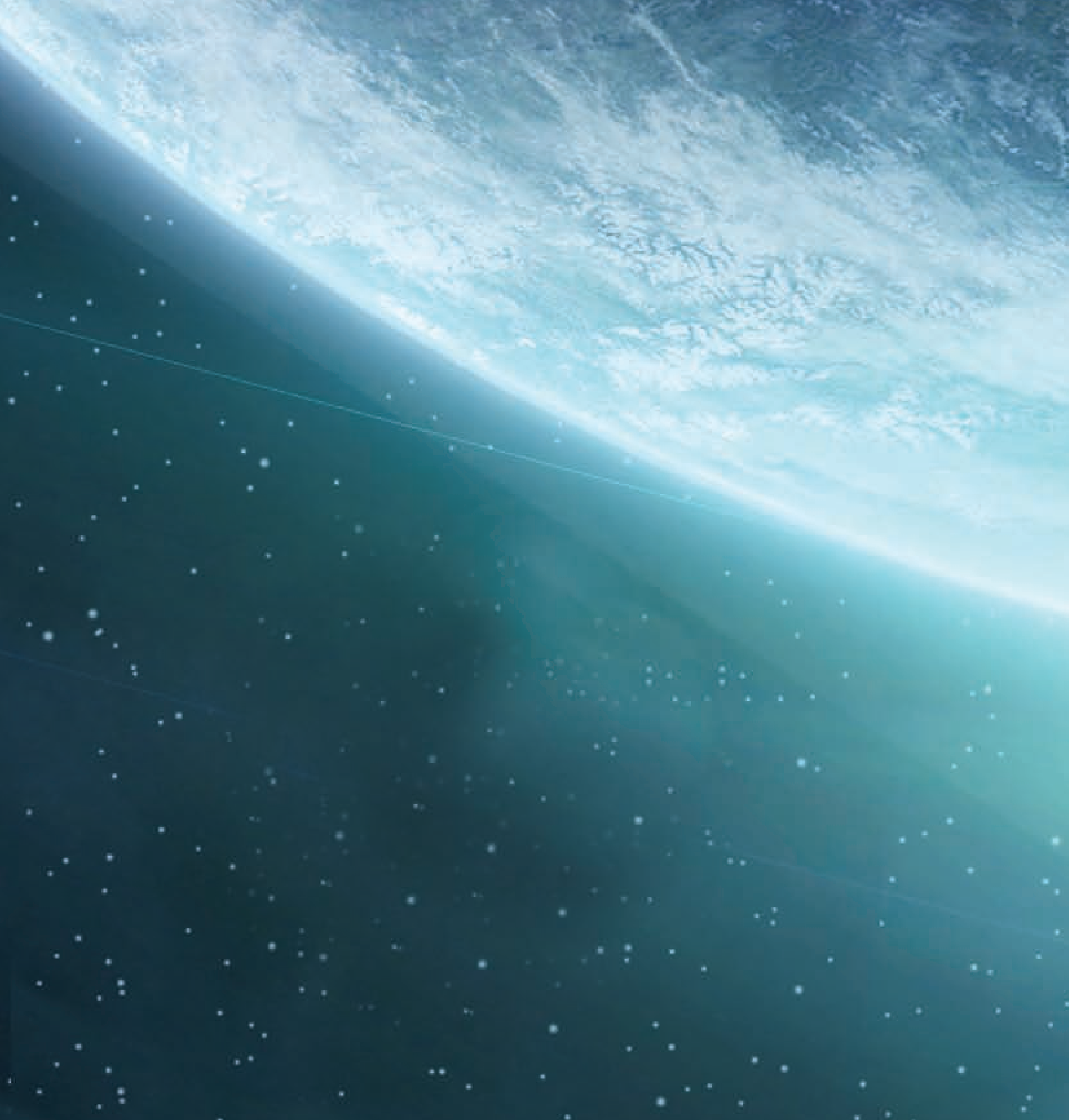

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