



# Making Materials Matter



Carborundum Universal Limited

Annual Report 2015-16

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

### **Cautionary Statement**

This Report contains statements relating to future business developments and economic performance that could constitute ‘forward looking statements’. While these forward looking statements represent the Company’s judgements and future expectations, a number of factors could cause actual developments and results to differ materially from expectations. The Company undertakes no obligation to publicly revise any forward looking statements to reflect future events or circumstances. Further, investors are requested to exercise their own judgement in assessing various risks associated with the Company and also the effectiveness of the measures being taken by the Company in tackling them, as those enumerated in this Report are only as perceived by the management.



# Making Materials Matter

From time immemorial, materials have played an integral role in the development of civilization. So much in fact, that they are associated with various Ages through which society, culture, and sophistication have evolved. When human life originated on earth, people intuitively relied on natural materials around them to satisfy their requirements. Popularly known as the Stone Age, this was the time when man engineered stone, clay, animal skin and wood to serve his needs. The Stone Age yielded to the Bronze Age around 3000 BC when man discovered copper. He learnt to alloy. This was a big breakthrough. He could now make his implements and utensils stronger and more durable; yet the metal's versatility allowed him to use the softer more yielding form to craft jewelry to adorn his body.

The Iron Age, around about 1200 BC gave birth to an even stronger material – iron – which lead on to the discovery of steel. In this environment, man's creativity and inventiveness blossomed unbridled. When people discovered a cheap process to make steel in the mid 1800's, industrial ingenuity asserted itself. Materials came to matter in all spheres of life – personal, trade, business, industry, and community. Infrastructure facilities were planned on a large scale. That is when railroads first appeared, allowing people and goods to travel long distances for the first time in history. People started to contemplate on materials in novel ways and alongside discovered new applications for them. Through a combination of physics and chemistry, they started to understand how materials behave as they do and why they differ in their properties. It became possible for them to custom design materials; to engineer their applications and to make them matter purposefully in a rapidly changing world. The modern industrial world was born.

Materials matter in different ways in different environments. For example, engine efficiency increases at high temperatures and therefore requires high temperature structural materials. Hypersonic flight requires materials that are light, strong and resist high temperatures. Optical communications require optical fibers that absorb light negligibly. Civil construction requires materials that are strong like metals and resist corrosion like plastics. But whether the material is a strong metal which can conduct electricity and is opaque; or a semiconductor which is opaque to visible light but transparent to the infrared; ceramic like glass and porcelain; or a polymer like polyester which is lightweight and decomposes at moderate temperatures; a composite like fiberglass, or a biomaterial, there is a strong need today to make materials work decisively across the various spheres of life. Materials matter not only because of their functional attribute but equally from the emotional and the aesthetic perspectives – the surface texture, the translucency, the softness or hardness, all of which combine to define the product, its form and its function. Understanding this to make materials work can help one realize an objective, a purpose. CUMI does that meticulously well. Whether abrasives, ceramics, refractories, or electrominerals, CUMI innovates solutions that consistently underscore customer delight, thereby influencing success stories in its markets, story by story.





“It turns out that even in our wireless world – perhaps especially in our wireless world – metals matter. GE’s Anthony Ku testified that his company utilizes 75 of the first 83 elements on the Periodic Table, spending \$40 billion a year on materials. As the pace of technological change accelerates, and several billion people on the planet migrate from subsistence living to some semblance of a middle-class lifestyle, mineral and metal demand will rise – for arcane elements and familiar metals as well – in the manufacturing world”.

*Source: [www.mineralsmakelife.org](http://www.mineralsmakelife.org).*

# MAKING IT MATTER FOR OUR BUSINESS



Minerals and mineral resources surround us every single day. The roads we ride or drive on, the buildings we live, learn and work in, all contain minerals. Given the wide spectrum of materials available to man and how pervasive they are in all that he does, it is important to make them work in the most favorable way possible.

Founded on this principle, CUMI manufactures all its products with highest quality materials in the industry. Its objective is simply, customer delight. Focused on giving its customers the optimum experience, CUMI develops top class services and solutions whether to do with abrasives, electrominerals, or ceramics. CUMI is a mines to market company. Its integrated operations include mining, power generation, fusing, manufacturing, marketing and distribution. CUMI caters to customers across 55 countries through its wide network of manufacturing facilities and marketing establishments.

Abrasive is a material that is used to shape or finish a work-piece through grinding. Abrasives are extremely commonplace and used extensively in industrial, domestic, and technological applications, particularly in automobile, engineering, fabrication, wood working, construction, home maintenance and infrastructure sectors.

CUMI's Abrasive business comprises the following product groups – Bonded Abrasives, Coated Abrasives (including Non-wovens), Super Abrasives, Metal working Fluids and Power Tools. Operations are carried out through eleven manufacturing facilities located pan India, Russia and other countries. Marketing entities located in North America, the Czech Republic and the Middle East facilitate access to key markets.

Collaborating with the Electrominerals division on joint development projects, the Abrasives division used high performance grains and enhanced its product performance. The division also identified specific initiatives within the technical goods business, resulting in a double digit growth for product groups like Flap Wheels, Mops, and Discs.

With continuing focus on market expansion through an increased geographic footprint nationally and overseas, CUMI identified and appointed more than 150 new Channel Partners in FY16, which helped to notch up its market share. Cost optimisation and process efficiency initiatives drove the consolidation of operations into Centres of Excellence.

The earliest ceramics made by humans were pottery objects – tiles, pots, art-ware, dinnerware, pottery and brick come to mind. The scope of ceramics has now expanded to include applications spanning domestic, industrial and building products.

CUMI's ceramics business has three product groups viz. Industrial Ceramics, Super Refractories and Anti-corrosives. The key user industries comprise power generation & transmission, coal washeries, grain handling, sanitary tiles & sanitary ware, ballistic protection, iron & steel industries, petrochemicals and construction. Operations are carried out through ten manufacturing/service facilities located in India, Australia and Russia. Subsidiaries in North America, Middle East and China support the business and facilitate extended customer reach.

The Industrial Ceramics division successfully completed the debottlenecking project in Metallized business and increased capacity to 1 million cylinders per annum. This process earned the division recognition from Confederation of Indian Industry as one of the top 25 innovative organisations in India at the CII Industrial awards, 2015. In FY16, the business decided to double the capacity of its Metallized Cylinder plant in Hosur by acquiring machinery and technology from NTK Japan. The new plant is expected to be operational in the next financial year.

Over the last two years, the Refractories business has invested in technology for a new product line that will cater mainly to the iron & steel and foundry industries. The new plant at Jabalpur will focus on flow control and POW wellfiller products and will target mini steel plants in the country. The Refractory business stays competitive by leveraging technology, enhancing product line and boosting service capabilities in the target market.

In the world of Electrominerals, CUMI is a leading player in Silicon Carbide and Fused Zirconia. In Fused Alumina, it is largely a national player with customers based in India. EMD's product range includes White and Brown Fused Alumina, Silicon Carbide, Fused Zirconia, Alumina Zirconia and Zirconia Mullite. 'Specials' include Semi Friable, Azure -S and fine powders. User industries for these products are abrasives, refractories, ceramics, steel, photovoltaic, brake linings, nuclear energy and others. Manufacturing operations are carried out through eight facilities in India, Russia and South Africa.



CUMI continues to focus on market expansion through an increased geographic footprint nationally and overseas.  
*(in pic: Shop floor of the facility in Australia)*






State-of-the-art facilities and strategic alliances with global partners have earned CUMI a reputation for quality and innovation.  
*(in pic: HH Andrei Bocharov Governor of Volgograd visiting the facility in Russia)*

MAKING IT MATTER FOR OUR PEOPLE





CUMI's energetic workforce is truly global and diverse with close to 40% of its people operating in offices and facilities outside India. This diversity not only helps in indentifying and understanding the unique needs of its customers across the world but also enables CUMI to respond to global trends swiftly. The employee centric work culture which provides professional freedom at all levels bridges the geographical gap amongst its people.

CUMI recognises that attracting and nurturing the right talent is a key HR imperative. This is appropriately addressed through the six strategic pillars – Building A Leadership Pipeline, Scaling Capability across the Organisation, Propelling Performance, Enhancing People Productivity, Improving Safety Performance and lastly Corporate Social Responsibility.

Initiatives like the HiPo exercise, career management framework etc. helps secure long term talent plan through targeted development. The learning & development programmes continue to be carried out with the same vigour and focused attention. Structured training programmes like the Business Leadership Programme, Young Leadership Programme (for middle management), training for senior executives on the Three Box strategic thinking concept etc. as well as sponsorship programmes for Bachelors/Masters programme in manufacturing technology, aids not only in honing the skill sets of the employees but also plays a vital role in leadership development.

FY 16 also saw cross functional movement of talent – a tremendous career pathing opportunity.

CUMI is committed to the safety and health of its employees. In order to maintain a safe working environment, continuous safety awareness sessions and training programmes on usage of personal protective equipments are conducted vigourously. Identification and elimination of unsafe working conditions is considered top priority at all levels of operations and dedicated efforts across all SBUs have markedly reduced accidents. During the year, the Maniyar plant won the safety award from National Safety Council, Kerala.

Initiatives on preventive health are also regularly rolled out supported by a robust On-Line Health Monitoring System. Several health oriented employee engagement initiatives like 10k challenge, 40 days fitness plan etc. were conducted across the Murugappa Group. The CUMI team not only participated in large numbers in these initiatives but also emerged as winners in the competitive sessions.




Diversity enables CUMI to respond to the trends quicker and stimulates innovation



Attracting and nurturing right talent is a key imperative in CUMI

# MAKING INNOVATION MATTER





Innovation is key not only to the success of a business but for its sustainability. Innovation lies at the core of CUMI's way of doing business. Its employees take pride in both process and product innovation which ultimately serve to increase customer delight. CUMI has been filing patents every year and several such were filed in FY16 besides creating IPs in the form of paper and journal submissions. CUMI's business units constantly explore joint project opportunities with each other to improve efficiencies. CUMI's innovation strategy, founded on the three boxes of Innovation – managing the present, selectively abandoning the past and creating the future – is set to create value for the organization.

The Electrominerals division started operations with the production of basic raw materials for abrasives and refractories. But commoditisation of products set the ball rolling to move into the specialty segment. Eagerness, curiosity and the humility to want to learn something new, paved the way for success. CUMI is revved up on all cylinders to move out of status quo and is eyeing the global markets for specialties.

In Electrominerals, expertise in the process of milling, classification, size & shape control have been leveraged to move into speciality applications like wafer slicing for photovoltaic & semiconductors, usage in diesel particulate filter, high end abrasives, refractories, engineered and friction materials. The business also redefined its capability by introducing the ultrafine range of powders. Various treatments that improve performance and provide additional benefits to the customer have already added value for regular products. Six variants have been released from the regular grades through these chosen treatments and an exclusive facility has been created to commercialise production. Proficiency in sol gel science allowed the division to gain a place in the premium segment of abrasive grains called AZURES. Continuous innovation enabled the release of high performing and application specific variants. Experience in such manufacturing technology and the learnings along the way enabled radical changes in the process. These were converted into intellectual property rights.

The Abrasives division identified moving to high-performance grains as a key strategic differentiator and during the year the business collaborated with Electrominerals division in Joint Development Projects. This helped the Abrasives SBU move up the Value Chain in terms of product performance.

The Industrial Ceramics division continued process and product innovations throughout the year. The recognition at the CII Industrial awards 2015 and launch of an array of new products like rubberized ceramic for vehicle armour applications, varieties in shaft sleeves, zirconia lance nozzles, mini mats for pyro jet burner applications/food applications, CUMI Tuff 90SP, Ceramic cone and grooved cylinders etc. are testimonials for this divisions' quest for technological advances.

CUMI relentlessly pursues value addition and differentiation through performance enhanced materials to meet demanding customer needs and to open up new market space.



The Industrial Ceramics division was recognized as one of the top 25 innovative organisations by CII





Coated Abrasives facility in Sriperumbudur which won the prestigious TPM award for excellence by the Japan Institute of Plant maintenance

# MAKING IT MATTER FOR THE CUSTOMER



CUMI puts the customer at the fulcrum of its business strategy. It understands their requirements and provides them holistic solutions rather than merely supplying them materials.

CUMI works together with its customers to successfully co-create products and solutions, thus making materials really matter to them. By understanding the customer's way of doing things, it is able to collaborate with them meaningfully and deliver sustainable solutions.

CUMI's customers are always welcome to visit its facilities. These visits are not necessarily confined to the product/solution needs of the customers but also extend to sharing of best practices like TQM, TPM etc. Factory visits and meets which are purposefully organised helps in building an enduring relationship with them. Besides the ongoing customer visits, CUMI also thoughtfully ensures celebrating milestones with them. During the year, the delivery of the 4 millionth cylinder to Schneider Electric, France, was celebrated with them at their office.

CUMI also actively participates in national and international exhibitions to create visibility for its brand. Its participation in GrindTec in Augsburg, Germany, Ceramitec in Munich, Germany, Powergen in Thailand, CAMEE in Bangalore and China Die-cast 2015 during the year, was well received.

With a desire to offer its customers superior differentiated service, CUMI launched CUMI Connect, a mobile solution in local language which complements the traditional network with easy anywhere access and efficient business transaction cycle time.





CUMI puts the customer at the fulcrum of its business strategy and provides them holistic solutions after understanding their requirements



CUMI successfully co-creates products and solutions with its customers

MAKING IT MATTER TO THE COMMUNITY





The Murugappa Group is well known for its philanthropy and community service and has set up service oriented institutions in the areas of education and healthcare in order to reach out to a large section of the community. This tradition is part of CUMI's ethos. CUMI implements its Corporate Social Responsibility agenda both directly as well as through the Group's Foundation.

The CUMI Centre for Skill Development (CCSD) set up initially in Hosur and recently replicated in Edapally train over 160 students from the less privileged rural community. The job oriented skill training enhances the employability and socio economic status of the students. Besides the technical training, soft skill training is also imparted facilitating their eventual employment in any industry. The CCSD students also engage in voluntary community services such as regulating traffic in crowded junctions etc.

In the quintessential CUMI way, timely assistance was granted to the community during the Chennai floods in December 2015. During the calamity, CUMI not only kept its Abrasives plants in and around Chennai running continuously, but also helped the severely affected community with supply of food, safe drinking water and other necessities. Regardless of their personal suffering during the calamity, CUMI's energetic and committed employees quickly formed rescue teams and assisted in the evacuation activities. In a supporting gesture, CUMI also contributed ₹ 7.5 million to the Chief Minister's Relief Fund.

# CHAIRMAN'S MESSAGE



Dear Shareholders,

The year 2015-16 has been a year of growth for CUMI despite the volatile global economy and challenging Indian market conditions. The global economy remained subdued with growth in emerging and developing economies constituting about 70% of the global growth, continued to decline and the advanced economies witnessed only a very modest recovery. In North America, despite a setback in the first quarter of 2015, the underlying drivers for a gradual acceleration in the economic activity remained intact. The eurozone economy remained sluggish and revival continues to be slow. The volatility and uncertainty in the Russian economy continues to adversely impact its currency. The economic outlook for the year 2016 globally is forecasted to see a marginal improvement from the 2015 levels. Notwithstanding the depressing global economy, India's economic growth continued during the year well supported by the Government's initiatives and reorientation programmes.

CUMI, its subsidiaries and joint venture companies had a significant year 2015-16. The standalone revenue of the Company recorded 11 per cent growth driven by enhanced

performances in the Abrasives and Electrominerals businesses. The consolidated revenue from operations grew marginally by 1.9 per cent largely owing to currency translation losses caused by the depreciation of the Russian Rouble as well as the winding down of operations in Thukela Refractories Isthibe, South Africa. However during the year, despite a marginal growth in revenues, the Company was able to record an impressive 48 per cent growth in its operating profits at a consolidated level signifying its resolute focus on delivering operational efficiencies. The Total Productive Maintenance practices now well imbibed within the CUMI plants and prudent cost management efforts aided in containing the manufacturing costs and optimising efficiency.

During the year, the Company continued its Research and Development initiatives which included several joint projects between the various business divisions in addition to engaging with third party expertise in specific fields. Aligned with its core belief that customers and business partners play a very crucial role in its growth, the customer and dealer engagement initiatives at CUMI progressed well.

In continuance of its unbroken dividend track record, a dividend of ₹ 1.50 per share was paid during the year which is higher than the dividend paid in the previous year. As a matter of prudence, the Board has recommended that the dividend paid during the year be treated as the final dividend by the shareholders.

Abrasives, CUMI's largest operating business recorded a good growth during the year in the backdrop of an improving domestic demand and aggressive expansion of the dealer network. The indigenous sourcing of input materials resulted in increased profitability. The operating margins improved owing to better efficiency across the value chain and strong distributor and customer partnerships. The business model in China was reviewed and it was decided to close manufacturing operations. A new toll manufacturing model has been set up in its place that will continue to deliver CUMI-quality products to our standards to address both the Chinese and International markets. The sale of the plant & machinery is in progress.

CUMI's subsidiary Sterling Abrasives which manufactures specialist conventional Abrasives and its joint venture Wendt India which addresses the Super Abrasives and Grinding machines market had marginal growth in their revenues. However, the profitability of these companies came under pressure owing to various factors including higher depreciation arising from capacity expansion, change in product mix etc.

In spite of having a difficult previous year, the Electrominerals business of CUMI made a quick turnaround and recorded an impressive growth both in terms of revenue as well as profitability. The demand for Abrasive grains increased substantially resulting in the increased volumes



and the business was able to establish its special products in the market. The business in Russia continued to be good despite the currency depreciation with Volzhsky Abrasive Works launching various grits with new fractions as per industry requirements. In South Africa, regardless of the drop in volumes, the profitability of Foskor Zirconia improved with the depreciating Rand. The relocation of the Electrominerals, Refractories and Bubble Zirconia plants in South Africa to India is underway and we believe that with greater levels of skill and technical attention the plant operations can improve significantly. CUMI Europe set up last year to serve the European markets better with greater customer connect is in the process of establishing its business presence.

The Ceramics businesses had a very tough year. While on a standalone basis there was a marginal improvement, at a consolidated level the revenues declined. The Industrial Ceramics did well with an increase in Metallized and Engineering Ceramics businesses. However, the Wear Ceramics business which is predominantly projects dependent continued to struggle in view of project deferrals in certain sectors. The Lined Equipment business at CUMI Australia continued to be good. Strategic initiatives have been undertaken to turn around the business in the Americas.

The marginal growth in Industrial Ceramics was off-set by lower sales in Refractories business including that of the joint venture Murugappa Morgan Thermal Ceramics. The decline in customer demand owing to projects deferment resulted in Refractories business continuing to have yet another difficult year. During the year, the legal process of amalgamation of Cellaris Refractories India, a company set up to manufacture ultra light weight Alumina Bubble Refractories for offering heat resistant products to customers of niche markets was completed and the benefits are expected to accrue shortly.

Despite being a difficult year on the operations front, the year 2016 was a year of recognition for the Industrial Ceramics division. It was recognized as one of the top 25 innovating companies in the Country by the Confederation of Indian Industry for its successful completion of the de-bottlenecking project in Metallized Cylinders business. The division continued to focus on Research and Development to leverage technology in providing value added products to its customers. The year 2015-16 was also a significant year with the Super Refractories division completing 50 years and the Industrial Ceramics division completing 25 years of operations.

The capital expenditure during the year increased substantially in view of the plant relocation projects which are under way as well as continued focus on improvement in quality, new products, innovation and automation at all manufacturing facilities. Capability development through structured training programmes progressed well during the year.

Being socially responsible, in addition to addressing the training and development needs of its employees, the Company through its dedicated Centre for skill development – CUMI Centre for Skill Development (CCSD) caters to the needs of the society too. The Centre provides vocational training including behavioral and communication skills to youth from rural and underprivileged societies. During the year, the Company successfully replicated the CCSD model of Hosur in Edapally, Cochin thus expanding its reach in this area.

Safety at the work place continues to be a top priority and periodic awareness sessions and workshops continue to be conducted for identification and elimination of unsafe working conditions.

The Company's debt equity ratio continues to be healthy owing to prudent working capital management. This is asserted by the fact that the capital expenditure programme(s) during the year were largely financed through internal accruals. A robust risk management framework aids in timely identification, evaluation and mitigation of risks on an ongoing basis. The adequacy of the internal control mechanisms are being continuously evaluated for ensuring effectiveness. The regulatory environment in the last few years has been very dynamic and the teams have been agile in quickly adapting to the changing scenario and delivering results.

The teams at CUMI, its subsidiaries and joint ventures ably led by K Srinivasan, Managing Director and his colleagues across units and geographies have risen up to the challenges with both conviction and commitment. My sincere thanks to all colleagues who have been instrumental in ensuring that the Company is back on the growth path with enhanced profitability. The involvement of the esteemed members of the Boards in guiding and supporting the teams is indeed most commendable. The Board deliberations have always been a good mix of encouragement, challenge and caution while ensuring sound governance and strict adherence to our core values and beliefs. I am thankful to the Board members for their time and wise counsel.

To all our stakeholders, customers, suppliers, vendors, bankers and of course to all of you shareholders our most grateful thanks for your unstinted support to the Company in its journey towards "Making Materials Matter".

M M Murugappan

# BOARD OF DIRECTORS



## **M M Murugappan, 60 years**

He holds a Masters degree in Chemical Engineering from the University of Michigan, USA. He has held the position of Managing Director of CUMI in the past. Besides serving as the Chairman of Tube Investments of India, Shanti Gears, Wendt (India) , Murugappa Morgan Thermal Ceramics and as the Vice Chairman of Cholamandalam Investment and Finance Company, he is on the Boards of several companies including Mahindra & Mahindra , IIT Madras Research Park and Cyient. Mr. Murugappan 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.



## **T L Palani Kumar, 66 years**

He is a Graduate in Chemical Engineering from IIT, Madras and a Post Graduate (Diploma) in Business Administration from IIM, 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 Board of Fostiima Integrated Learning Resources Private Limited.



## **M Lakshminarayan, 69 years**

He holds a Masters degree in Mechanical Engineering from IIT, Mumbai and is a fellow member of the Indian Institute of Production Engineering. He has served as the Joint Managing Director of Bosch Limited. Besides being the current Chairman of WABCO India and Harman International (India) Private Limited, he is also on the Boards of several companies like Rane (Madras), TVS Electronics and Kirloskar Oil Engines India Limited.

He has been the Chairman of Confederation of Indian Industry, Southern Region Council & Karnataka State Council besides being a member of Karnataka State Industrial Policy Board and an Executive Council Member of Indian Machine Tool Manufacturer's Association.



## **Shobhan Thakore, 68 years**

He holds a Bachelor's degree in Arts (Politics) and Law from the Mumbai University. He is a Solicitor of High Court Mumbai and the Supreme Court of England and Wales. He has more than 4 decades of experience as an advocate. He has been a partner of Bhaishankar Kanga & Girdharlal and AZB & Partners, Advocates & Solicitors. He is the co-founder of the law firm Talwar Thakore & Associates. He is currently on the Boards of various companies including Alkyl Amines Chemicals, Birla Sun Life Insurance Company, Bharat Forge, Morarjee Textiles, Reliance Jio Private Limited, etc.

**Sanjay Jayavarthanelu, 47 years**

He 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.



**Aroon Raman, 56 years**

He 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. He is currently the Managing Director of Telos Investments & Technologies Private Limited and is also on the Boards of various companies including Sundaram Finance, Wheels India, Brigade Enterprises, TVS Automobile Solutions and EduTech NTTF Private Limited.



**Bharati Rao, 67 years**

She 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, SBI Caps(UK), Wheels India Limited etc.



**K Srinivasan, 58 years**

He 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 on the Boards of Wendt India, Sterling Abrasives and Volzhsky Abrasive Works etc.



# SENIOR LEADERSHIP



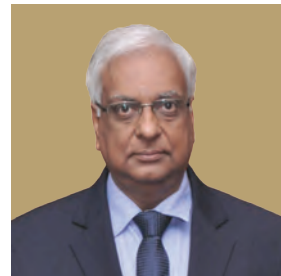
K Srinivasan  
Managing Director



N Ananthaseshan  
President, Abrasives



Rajesh Khanna  
EVP - Ceramics



R Rajagopalan  
EVP - Refractories & Prodorite



P S Jayan  
Sr. VP - Electrominerals



M Muthiah  
EVP - Human Resources



Sridharan Rangarajan  
Chief Financial Officer



Rekha Surendhiran  
Company Secretary



Sergey Kostrov  
General Director  
Volzhsky Abrasive Works



Sergey Petrosian  
Director, CUMI International



Trevor Allen  
CEO, CUMI Australia



Albert Render  
CEO, Foskor Zirconia



Ronald Smith  
CEO, CUMI America



Vladimir Gerasimov  
CEO, CUMI Europe



Daryll Wu Feng  
CEO, CUMI China



Business Excellence Award

CII Award



Green Manufacturing Award

VAW celebration of 55 years

Milestones with customers



SR - 50 Years

IC - 25 Years



Employees of VAW celebrating 55 years

Display at GrindTec, Germany

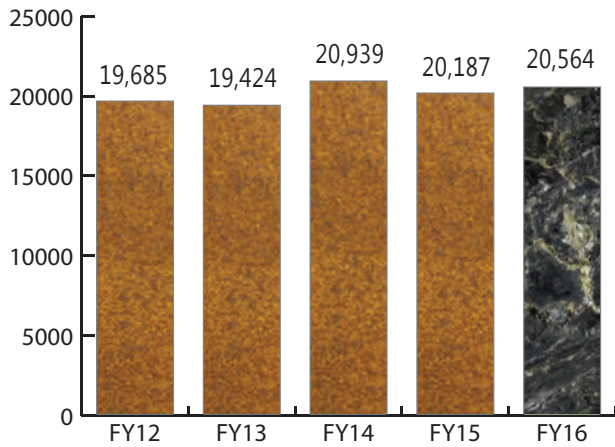


Technology Transfer Agreement with ISRO

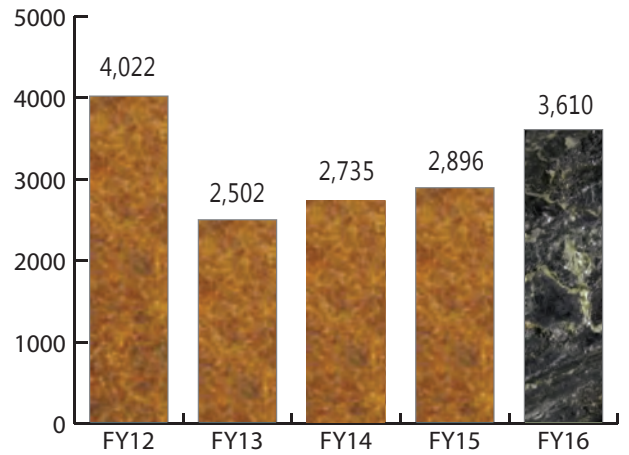
Board of Directors visit to Ranipet facilities

# FINANCIAL HIGHLIGHTS

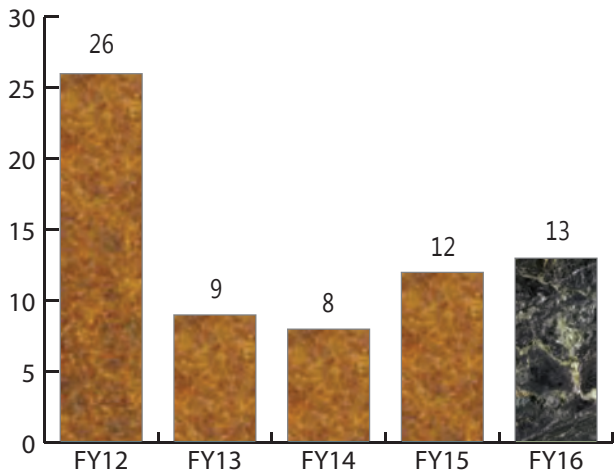
**Net Sales** (₹ Million)



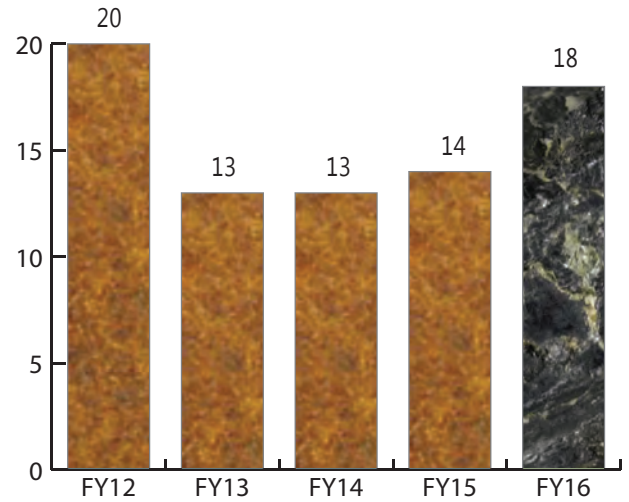
**EBITDA** (₹ Million)



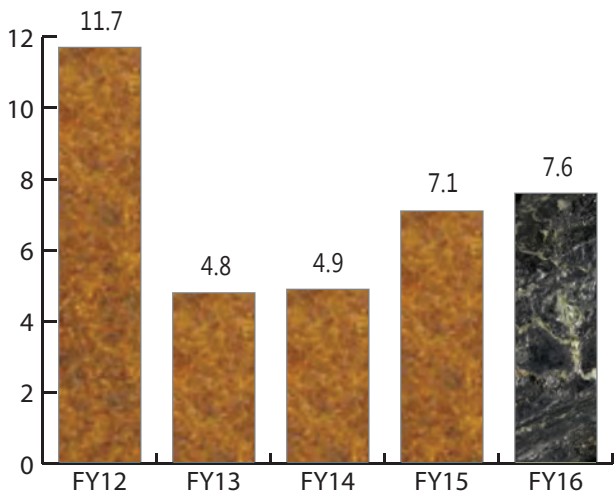
**Return on Equity** (%)



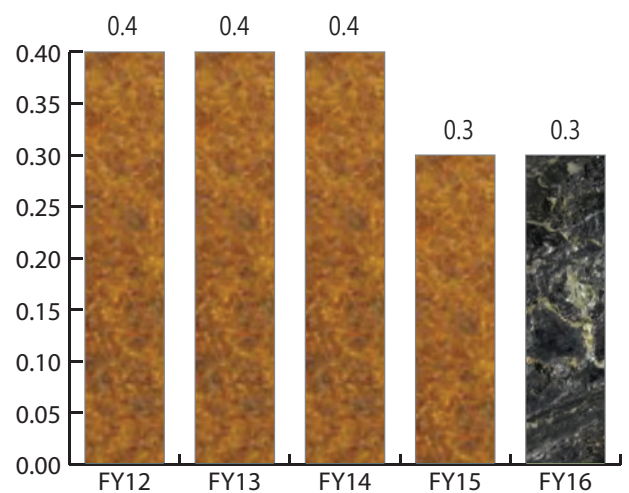
**EBITDA Margin** (%)



**Earnings per Share** (₹)



**Debt / Equity** (x)



# 5 YEARS AT A GLANCE

(Amount in ₹ Million)

Summary information	Consolidated performance					Standalone performance				
	2016	2015	2014	2013	2012	2016	2015	2014	2013	2012
Net Sales	20,564	20,187	20,939	19,424	19,685	12,810	11,518	11,276	10,800	11,052
EBITDA *	3,610	2,896	2,735	2,502	4,022	2,384	1,800	1,645	1,712	2,354
PBIT *	2,666	1,892	1,825	1,791	3,453	1,762	1,212	1,154	1,244	1,918
PBT	2,439	2,204	1,543	1,519	3,227	1,673	1,994	1,024	1,080	1,894
PAT	1,428	1,326	915	898	2,193	1,163	1,483	728	745	1,467
Net Fixed Assets	6,930	7,204	8,260	8,273	6,500	4,515	4,070	4,283	4,286	4,126
Net Working Capital	4,691	3,790	4,491	4,324	5,023	2,887	2,939	2,593	1,662	1,755
Non Current Investments	86	78	81	12	12	2,446	2,375	1,306	1,246	1,246
Shareholders Network	11,859	10,887	11,060	10,592	9,470	9,470	8,599	7,336	6,845	6,366
Loan Funds	3,108	3,402	4,563	4,349	3,992	1,091	835	1,188	1,322	1,596
<b>Ratio Analysis</b>										
<b>Performance Ratios</b>										
EBITDA / Net Sales %	18%	14%	13%	13%	20%	19%	16%	15%	16%	21%
PBIT / Net Sales %	13%	9%	9%	9%	18%	14%	11%	10%	12%	17%
Asset Turnover times	1.1	1.1	1.1	1.1	1.3	1.3	1.3	1.2	1.2	1.3
Return on Capital Employed %	17%	12%	11%	12%	26%	18%	13%	14%	15%	23%
Return on Equity	13%	12%	8%	9%	26%	13%	19%	10%	11%	25%
International Revenue share %	43%	46%	50%	51%	49%	21%	20%	19%	21%	22%
<b>Leverage Ratios</b>										
Interest Cover times	15.9	11.4	9.7	9.2	16.1	26.8	20.7	12.7	10.4	13.5
Debt Equity Ratio	0.3	0.3	0.4	0.4	0.4	0.1	0.1	0.2	0.2	0.3
Debt / Total Assets	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.2
<b>Liquidity Ratio</b>										
Current Ratio	1.9	1.7	1.8	1.8	2.0	2.2	2.6	2.2	1.6	1.7
<b>Activity Ratio</b>										
Inventory Turnover days	69	74	73	76	67	62	63	59	62	57
Receivable Turnover days	68	71	68	68	64	68	71	69	65	60
Creditors No of days	45	49	46	48	44	43	43	43	45	44
Cash Cycle days	92	96	95	96	87	87	91	85	82	73
<b>Investor related Ratios <sup>§</sup></b>										
Earning Per Share (₹)	7.6	7.1	4.9	4.8	11.7	6.2	7.9	3.9	4.0	7.8
Dividend Per Share (₹)	NA	NA	NA	NA	NA	1.5	1.2	1.2	1.3	2.0
Dividend Payout	NA	NA	NA	NA	NA	24.7%	16.7%	36.2%	36.2%	29.1%
Price to Earnings Ratio	23.0	25.4	25.3	31.0	12.8	-	-	-	-	-
Enterprise Value / EBITDA	9.8	12.7	10.1	12.8	7.9	NA	NA	NA	NA	NA
Enterprise Value / Net Sales	1.7	1.8	1.3	1.7	1.6	NA	NA	NA	NA	NA

\* excluding exceptional income / (expense) (Net)

§ Investor related ratios for the earlier years were made comparable with the current year consequent to sub-division of the face value of equity share from ₹2 per equity share to ₹1 per equity share.

# Glossary

## A Performance Ratios

EBITDA/Net Sales %  $\text{EBITDA} = \text{PBT} + \text{Interest} + \text{Depreciation} - \text{Exceptional items}$

PBIT/Net Sales %  $\text{PBT} + \text{Interest} - \text{Exceptional items}$

Asset Turnover times (excluding Investments)  $\text{Net sales}/\text{Average Capital Employed excluding Investments}$

Return on Capital Employed %  $\text{PBIT}/\text{Average Capital Employed}$

Return on Equity  $\text{PAT}/\text{Average of Shareholder's Funds}$

## B Leverage Ratios

Interest Cover times  $\text{EBITDA}/\text{Interest cost}$

Debt Equity Ratio  $\text{Total Debt}/\text{Shareholders Funds}$

Debt/Total Assets  $\text{Total Debt}/\text{Total Assets}$

## C Liquidity Ratio

Current Ratio  $\text{Current Assets}/\text{Current Liabilities}$

## D Activity Ratio \*

Inventory Turnover days  $\text{Average Inventory}/(\text{Turnover}/365)$

Receivable Turnover days  $\text{Average Receivables}/(\text{Turnover}/365)$

Creditors No. of days  $\text{Average Trade Creditors}/(\text{Turnover}/365)$

Cash Cycle days  $\text{Inventory Turnover} + \text{Receivables Turnover} - \text{Creditors No. of days}$

\* based on Turnover and average of opening/closing parameters

## E Investor related Ratios

Price to Earnings Ratio  $\text{Average share price of monthly high low}/\text{EPS}$

Enterprise Value/EBITDA  $\text{Total Enterprise Value}^\wedge/\text{EBITDA}$

Enterprise Value/Net Sales  $\text{Total Enterprise Value}^\wedge/\text{Net Sales}$

$^\wedge$  Enterprise Value  $\text{Market Capitalisation} + \text{Loan Funds} + \text{Minority Interest} - \text{Cash \& Cash Equivalents}$



# Corporate Information

## BOARD AND COMMITTEES

### The Board of Directors

M M Murugappan, Chairman (DIN 00170478)  
T L Palani Kumar (DIN 00177014)  
M Lakshminarayan (DIN 00064750)  
Shobhan M Thakore (DIN 00031788)  
Sanjay Jayavarthanavelu (DIN 00004505)  
Aroon Raman (DIN 00201205)  
Bharati Rao (DIN 01892516)  
K Srinivasan, Managing Director (DIN 00088424)

### Committees of the Board

#### Audit Committee

T L Palani Kumar, Chairman  
M Lakshminarayan  
Sanjay Jayavarthanavelu  
Bharati Rao

#### Nomination & Remuneration Committee

M Lakshminarayan, Chairman  
T L Palani Kumar  
Shobhan M Thakore

#### Corporate Social Responsibility Committee

Shobhan M Thakore, Chairman  
Aroon Raman  
K Srinivasan

#### Risk Management Committee

M Lakshminarayan, Chairman  
K Srinivasan

#### Stakeholders Relationship Committee

M M Murugappan, Chairman  
K Srinivasan

## MANAGEMENT COMMITTEE

K Srinivasan, Managing Director  
N Ananthaseshan, President - Abrasives  
Rajesh Khanna, Executive Vice President - Ceramics  
R Rajagopalan, Executive Vice President - Refractories & Prodorite  
M Muthiah, Executive Vice President - Human Resources  
Sridharan Rangarajan, Chief Financial Officer  
P S Jayan, Senior Vice President - Electrominerals

## COMPANY SECRETARY

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

## STATUTORY AUDITOR

Deloitte Haskins & Sells, Chartered Accountants, Chennai

## BANKERS

State Bank of India  
Standard Chartered Bank  
Bank of America  
The Hongkong and Shanghai Banking Corporation Ltd  
Royal Bank of Scotland  
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: 040-67162222, Fax: 040-23001153  
Toll Free no.: 1800-345-4001  
Email: einward.ris@karvy.com; Website: www.karvy.com  
Contact Person: Mrs. Varalakshmi P - Asst. General Manager

# Report of the Directors

Your Directors have pleasure in presenting the 62<sup>nd</sup> Annual Report together with the Audited financial statements for the year ended 31<sup>st</sup> March 2016. 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 year 2015 witnessed unusual volatility in the international economic environment. Global economic activity remained subdued. As per International Monetary Fund (IMF), growth in emerging market and developing economies declined, while a modest recovery continued in advanced economies. The global economy growth rate is estimated at 3.1 per cent in 2015. As per IMF update, the three key transitions that continue to influence global outlook are: (1) the gradual slowdown and rebalancing of economic activity in China away from investment and manufacturing towards domestic consumption and services (2) lower prices for energy and other commodities; Oil prices have declined markedly since September 2015 due to oversupply and continued moderate demand. Lower oil prices strain the fiscal positions of fuel exporters and weigh on their growth prospects while supporting household demand and lowering business energy costs in importers especially in advanced economies, where price declines have been passed on to end users, and (3) a gradual tightening in monetary policy in the United States in the context of a resilient U.S. recovery as several other major economy's central banks continued to ease monetary policy.

Amidst this depressed outlook, India stood out as a haven of stability and an outpost of opportunity. Its economic growth is amongst the highest in the world, helped by a reorientation of Government spending towards needed public infrastructure. Economic growth in India accelerated in fiscal year 2015, despite a double-digit decline in exports. Regardless of a weak monsoon for a second consecutive year, agriculture grew by 1.1 per cent in FY 2015, mainly due to strong growth in livestock. As per Asian Development Bank, after growing by 5.9 per cent in FY 2014, industry accelerated further to 7.3 per cent in FY 2015. Expansion in services moderated to 9.2 per cent. Private consumption growth is estimated to have picked up to 7.6 per cent in FY 2015 from 6.2 per cent a year earlier. Advance Government estimates point to the economy growing at 7.6 per cent in FY 2015-16 similar to last year.

On the Government's "reform to transform" agenda, a series of measures, each incremental but collectively

meaningful have been enacted. There have also been some disappointments especially such as the delay in introduction of Goods & Services Tax, Land and Labour Law reforms. Markets remained volatile amidst fears that the global recovery could be getting delayed.

## Company Performance

### Revenues

The standalone business grew at 11 per cent driven by Abrasives and Electromineral business.

Demand improvement from user industries, new product launches, expanding customer base, wresting market share resulted in a better topline growth.

The Company's consolidated revenue from India increased by 6 per cent and from rest of the world dropped by 3 per cent resulting in worldwide revenues increasing by 2 per cent from last year levels.

At a consolidated level, Abrasives sales grew by 6 per cent, whereas sales of Electrominerals segment remained at the same level due to rouble translation and winding down of operations at Thukela Refractories Isithebe Pty Ltd., South Africa. Ceramic sales at a consolidated level decreased by 3 per cent.

The standalone top line summary is as follows: ₹ million

	31.03.2016	31.03.2015
Net sales & income from contracts & services		
India	10086	9268
Rest of the world	2724	2250
<b>Total</b>	<b>12810</b>	<b>11518</b>
Other operating revenue	183	169
<b>Total operating revenue</b>	<b>12993</b>	<b>11687</b>

The consolidated top line summary is as follows: ₹ million

	31.03.2016	31.03.2015
Net sales & income from contracts & services		
India	11621	10962
Rest of the world	8943	9225
<b>Total</b>	<b>20564</b>	<b>20187</b>
Other operating revenue	279	315
<b>Total operating revenue</b>	<b>20843</b>	<b>20502</b>

### Manufacturing

Most of the plants in India operated at about 70 per cent capacity utilisation levels. The manufacturing team continued implementation of Total Productive Maintenance (TPM) at shop floors leading to improvement in efficiency of machines and the entire production process.

Lower fuel rates, coupled with moderation in commodity prices, usage of alternate cost effective raw materials, improvement in raw material consumption and process improvements resulted in containment of the manufacturing costs. Various value adding, cost cutting and productivity improvement projects were undertaken to minimise the impact on the operating profits despite lower plant utilisation.

Capital expenditure during the year across all geographies was in the nature of maintenance, automation, quality enhancement, line balancing and general infrastructure. The relocation projects from South African entities to India is in progress and is expected to be completed in the next financial year.

### Earnings & Profitability

Aided by the growth in revenues, standalone earnings from operations before exceptional items, interest, depreciation and tax improved to ₹1985 million (previous year ₹1490 million).

Profit before interest and tax margin expanded for all segments due to higher sales and lower costs mainly from fuel and other commodities.

Finance costs were at ₹89 million compared to ₹87 million in previous year. Profit before tax and exceptional income increased from ₹1125 million to ₹1673 million. Profit after tax of ₹1163 million was lower compared to that of the previous year ₹1483 million (previous year included an exceptional item of ₹869 million).

On a consolidated basis, profit before exceptional items and tax increased from ₹1639 million to ₹2439 million. Profit after tax and minority interest was ₹1428 million (previous year ₹1326 million included exceptional item of ₹565 million).

Segmental profitability improved for Abrasives and Electrominerals; however it dropped for Ceramics. In Electrominerals, profits increased due to restructuring of the South African entities.

### Financial Position

On a standalone basis, shareholders funds as on 31<sup>st</sup> March 2016 was ₹9470 million. Additions for the year (net of dividends) was ₹871 million.

Non-current liabilities was ₹682 million. Current liabilities increased from ₹1887 million to ₹2438 million.

Non-current assets (including fixed assets, capital work-in-progress etc.) increased from ₹6629 million to ₹7265 million primarily on account of capital expenditure incurred during the year. Current assets were higher at ₹5325 million.

On a consolidated basis, shareholders funds as on 31<sup>st</sup> March 2016 was ₹11859 million. There was an increase (net of dividends) to the extent of ₹972 million. Minority interest was at ₹713 million.

Non-current liabilities was ₹797 million and Current liabilities was ₹5466 million.

Non-current assets (including fixed assets, capital work-in-progress etc.) increased from ₹8786 million to ₹8679 million. Current assets increased to ₹10157 million.

### Cash Flow

On a standalone basis, net cash generation from operations was ₹1236 million in FY 2015-16. Net cash outflow on account of investing activities was ₹885 million. Net cash outflow on account of financing activities was ₹322 million which is attributable primarily to repayment of borrowings and dividends paid. The net increase in cash and cash equivalents was ₹29 million against a decrease of ₹50 million in FY 2014-15.

On a consolidated basis, net cash generation from operations was ₹2239 million in FY 2015-16. Net cash outflow on account of investing activities was ₹1009 million. Net cash outflow on account of financing activities was ₹891 million which is attributable primarily to repayment of borrowings and dividends paid. The net increase in cash and cash equivalents was ₹131 million against an increase of ₹282 million in FY 2014-15.

### SHARE CAPITAL

The paid up equity share capital as on 31<sup>st</sup> March 2016 is ₹188.38 million and increased during the year by ₹0.20 million, consequent to allotment of shares upon exercise of stock options by employees under the Company's ESOP Scheme, 2007.

During the year, the Hon'ble High Court of Madras sanctioned and confirmed the Scheme of Amalgamation of Cellaris Refractories India Limited (CRIL), a wholly owned subsidiary of the Company with it, effective from the appointed date 1<sup>st</sup> April 2015. Consequent to this merger, the authorised share capital of the Company increased from ₹250 million (25,00,00,000 equity shares of ₹1 each) to ₹387.25 million (38,72,50,000 equity shares of ₹1 each).

## DIVIDEND

Considering the past dividend payout ratio and the current year's operating profit, the Board has considered it appropriate to recommend to the shareholders of the Company, confirmation of the interim dividend of ₹1.50 per equity share of ₹1 each paid during the year as the final dividend. This dividend was paid as ₹1 per equity share in February 2016 and ₹0.50 per equity share in March 2016. The dividend of ₹1.50 per equity share of ₹1 each paid during the year is higher than last year.

## APPROPRIATIONS

The amounts available for appropriation and the recommended appropriations on a standalone basis are given below:

	₹ million
<b>Available for appropriation</b>	
Profit after tax	1162.78
Balance brought forward from previous year	3006.21
<b>Total</b>	<b>4168.99</b>
<b>Recommended appropriation</b>	
Transfer to general reserve	500.00
<b>Dividend</b>	
- Interim	282.56
<b>Dividend Tax</b>	
- Interim	4.18
Final Dividend (previous year)*	0.03
Balance carried forward	3382.22
<b>Total</b>	<b>4168.99</b>

\*Represents dividend of ₹29,160 on 58,320 equity shares allotted under the ESOP Scheme 2007 to employees, subsequent to the date of approval of the annual accounts by the Board on 1<sup>st</sup> May 2015 and before the book closure date last year.

Information required to be provided in the Management Discussion and Analysis as per the Listing Regulations is given below:

## PERFORMANCE OF BUSINESS SEGMENTS

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

### Abrasives

#### Business Profile

This business comprises the following major product groups viz. Bonded Abrasives, Coated Abrasives (including Non-Wovens), Super Abrasives, Metal working fluids and

Power Tools. The operations are carried out through eleven manufacturing facilities located in India, Russia, China and Thailand. The marketing entities located in North America and Middle East enables the division to reach out to those geographies.

Abrasives are materials that are used to grind, abrade or clean work pieces to give desired shape and finish. They are of different types, but can be broadly classified into Bonded, Coated, Loose Abrasive Grains, Super Abrasives and others. Abrasives are used in a wide spectrum of industries, the key among them being automobile, engineering, fabrication, wood working, construction, home maintenance and infrastructure.

The Company caters to customers located around fifty five countries through its network of manufacturing facilities and marketing establishments. It is one of the major players in India and Russia.

#### Industry scenario

The global industry continues to be led by few players who have a complete portfolio of Abrasive products. There are also a large number of players specialising in specific categories of Abrasives. No major international mergers & acquisitions deals were witnessed during the year.

The Indian Abrasives industry is catered to by a few large players, numerous smaller players specialising in select products and imports from China catering to the low end of the market. India continues to be a focus region for major global players with its economic growth better than most of the other regions in the world.

In the domestic Russian market there are three major players. The Company is a major player in Vitrified Bonded Abrasives. Imports continue to service a sizeable portion of the market though in the last couple of years import quantum has marginally reduced owing to a depreciated rouble.

Demand for Industrial Abrasives is fostered by renewed industrialisation activity in the developing regions, rising per capita income and consumer spending, enhanced manufacturing activities in the durables sector and increased fixed investments. Boost in the construction and manufacturing sectors and per capita income would result in bolstering demand for Industrial Abrasives.

There was no major change in the industry structure during the year.

#### Sales Overview

Notwithstanding the delay in implementation of several announced projects, deluge in the Southern region of India as well as lower than average festive season demand, the Abrasives business on a standalone basis recorded a growth in revenue from ₹6689 million to ₹7260 million, a growth of 9 per cent.

The growth was fuelled by recovery in the domestic business of select Resinoid products from prior year lows, increase in exports of smaller size Resinoid wheels, better performance from Coated products, import substitution, introduction of new technical products and continued usage of captive high performance grains across products.

During the year, the business aggressively appointed new channel partners and expanded its dealer network. Retail development and industrial storming initiatives were carried out which gave the necessary mileage. Emphasis was given on the core business with introduction of new products and brands in the Vitrified standard range and select Resinoid ranges. New technically advanced products were launched in Bonded non-standard space. Successful realisation of the synergy effect of consolidation of Super Abrasives and Power Tools gave higher growth in those product segments.

In Coated products, business aggressively targeted new territories through new product launches, upgraded select products to international benchmarks and targeted Tier II and Tier III segments. In Exports, bulk supplies were made to international customers and talks were also initiated with new customers. In Non-Woven business, the focus during the year continued on increased participation in the industrial segment and development of new products.

Continued marketing activities with various partners, introduction of new technically advanced products and favourable pricing with a superior application engineering helped CUMI Abrasives division to remain competitive in the market ahead of its peers.

The Abrasives consumption in Russia further declined this year due to the economic recession and a contraction in the economic activity. The translation of sales in Russian rouble into Indian rupees further accentuated the impact. Chinese entity also had a lower sales. Wendt India which addresses the Super Abrasives & Grinding machines market had a marginal growth in its revenues.

## Manufacturing

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

## Key Financial Summary

Particulars	Standalone			Consolidated		
	2015-16	2014-15	Change	2015-16	2014-15	Change
Total revenue	7260	6689	9%	9117	8590	6%
Segment results (PBIT)	941	679	39%	892	627	42%
Capital employed	3301	3259	1%	5106	5496	(7)%
Share to total revenue of CUMI	57%	58%		44%	43%	
Share to segment results (PBIT) of CUMI	56%	55%		31%	29%	

₹ million

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 Abrasives business. Key initiatives undertaken towards fulfillment of the strategy were commencement of techno commercial projects to sustain cost reductions, joint projects with Electrominerals division, identification of alternate suppliers and business partnering with key suppliers. Raw material, power and fuel costs were contained below the planned levels which led to better profitability.

Significant number of value projects tailored to meet cost reduction through improvement in material efficiencies, labour productivity improvements and maintenance efficiencies continued during the year.

Modifications were made in the production process which resulted in better product consistency and performance. Focus continued to be on consolidation of operations and maximising the investments made in the earlier years.

Last year, Sriperumbudur and Maraimalai Nagar plants were awarded Total Productive Maintenance (TPM) award for Excellence - Category "A" by Japan Institute of Plant Maintenance (JIPM). The journey continued this year also with Thiruvottriyur plant passing the first test, thus qualifying for the JIPM audit after clearing the CII TPM Health check. TPM activities were also initiated in the Hosur and Uttarakhand plants. TPM benefits in enhancing equipment effectiveness, debottlenecking various constraints in the production process, thus releasing additional capacity and reducing lead time in production.

As a part of the restructuring initiatives in China, the manufacturing operations have been discontinued and a new business model for the future business operations is being evaluated.

Aided by buoyancy in revenues and cost reduction projects and others initiatives, the business recorded an increase in standalone operating profits before interest and taxes at ₹941 million from ₹679 million last year. At a consolidated level, the profits grew from ₹627 million last year to ₹892 million this year.

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

### Industry scenario

There has been no material change in the Ceramics industry structure in India, which is catered to by a few major players. Globally however, NTK Japan exited Metallized ceramics business and its equipment and technology were acquired by CUMI Ceramics business.

CUMI is a reputed and a leading international player in specific market segments.

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.

The Refractory industry in Russia is a highly fragmented market with several players. Volzhsky Abrasives Works (VAW) caters primarily to the aluminium industry in Russia.

### Sales Overview

Revenues of the Ceramics business grew by 1 per cent on a standalone basis from ₹3146 million to ₹3189 million.

The Industrial Ceramics division had a reasonable growth on the back of significant increase in Metallized Ceramics and Engineering Ceramics business. The business was able to tide over the challenges of deferment in schedules from select customers by adding new customers and augmenting the customer basket.

Domestic Wear Ceramics business, which is around fifty to sixty per cent project dependent, continued to grapple with the issues of project deferrals in power sector. In order to derisk project dependency, the business focussed on ceramics conversion opportunities and repairs & maintenance in coal washeries, mining, cement and private power plants. The business also strengthened relationship with Original Equipment Manufacturers (OEM) from non-power sector.

In exports, cement and power segments were targeted in ASEAN countries, Middle East, China and South Africa.

The business in lined equipments from Australian market continued to be good. The American ceramics business leadership has been strengthened and consequently future strategies to target that market have been initiated.

The growth in Industrial Ceramics was offset by lower sales in Refractories business in India. In Russia, Nitride Bonded Silicon Carbide Refractories which primarily caters to aluminum industry registered growth on revenues abetted by broad basing the range of Refractory products.

### Key Financial Summary

₹ million

Particulars	Standalone			Consolidated		
	2015-16	2014-15	Change	2015-16	2014-15	Change
Total revenue	3189	3146	1%	4678	4817	(3)%
Segment results (PBIT)	398	363	10%	659	678	(3)%
Capital employed	2754	2587	6%	3998	4002	0%
Share to total revenue of CUMI	25%	27%		23%	24%	
Share to segment results (PBIT) of CUMI	24%	29%		23%	32%	

## Manufacturing

The Industrial Ceramics division was able to successfully complete the debottlenecking project in Metallized business resulting in increasing the current capacity to 1 million cylinders per annum. For this innovation, the division won recognition as one of the top 25 innovating companies in India from the Confederation of Indian Industry. This year the business embarked on a significant milestone to double the capacity of the Metallized Cylinder plant in Hosur by acquiring machinery and technology from NTK Japan. The new plant will have the capability to produce 720000 cylinders per annum and is expected to be operational in the next financial year. With this expansion, the Company can boast of being a significant player in the Metallized space internationally with an overall capacity of 1.72 million cylinders per annum.

Key Research and Development projects were initiated targeting steel applications, implementing casting and moulding technologies and conceptualizing new product development with composites. Successful completion of these R&D projects would enable the business to target high value added products.

The Refractories business over the last two years has invested on new technology for new product lines, mainly for iron & steel and foundry industry. Last year, the Company took a decision to shift the plants of Thukela Refractories Isithebe Pty Ltd., South Africa relating to flow control and POW wellfiller products to Jabalpur, India. The facility will target mini steel plants in India and is expected to get commissioned in the next financial year. With these investments, the Refractory business intends to leverage technology, new products and service capabilities to be competitive in the target market segments.

## Electrominerals

### Business Profile

The major product groups of this segment are Fused Alumina (comprising brown and white Alumina), Silicon Carbide, Fused Zirconia, Alumina 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. Key user industries for this business are abrasives, refractories, steel, photovoltaic, brake linings, nuclear energy, wooden laminates, semiconductor and others. The business also has captive bauxite mines, sand mines and a captive power plant.

### Industry Scenario

The market structure in the global Electrominerals business remained largely unchanged.

In Fused Alumina, the Company is largely a national player with customers based in India. Apart from the domestic

players, imported products have a visible share in the market. Competitive imports become favourable or unfavourable depending on Free Trade Agreements between countries, duty structures and exchange rates.

In the global Electrominerals business, 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 ₹3127 million, which was 34 per cent higher compared to last year standalone revenues of ₹2338 million. The growth was largely due to higher Alumina sales.

In the standalone business, demand for Electrominerals grains was moderate from Refractory customers, however, the Abrasive grains showed a good growth trend. The business could establish its special products with domestic and internal customers. Bulk supplies of Silicon Carbide Micro fine powders were made to some of the solar photovoltaic customers.

In South Africa, the Fused Zirconia sales was marginally lower, but the profits grew at the back of operational efficiency and restructuring. The Russian operations continued to fuse with full capacity utilisation. The business being a net exporter in foreign currency, continued to benefit from a depreciated rouble, delivering a stellar top line growth in rouble currency. The entity also launched various grits with new fractions meeting industry requirements.

### Manufacturing

The fused minerals operations in South Africa, which was acquired during the second quarter of FY 2012-13, were mothballed and the two furnaces meant for fusion is being relocated to Edapally plant in India in this year. The production is expected to commence from next financial year. The Bubble Zirconia plant in South Africa which faced production related challenges is also being relocated to Edapally, India. The new plant is expected to commence next year.

The merger of wholly owned subsidiary, Cellaris Refractories India Limited with the Company was completed during the year. The commercial establishment of light weight alumina cells for use in Refractory industry is in progress.

A grain treatment facility is in the process of being set up which will enable creation of value added grains. With an aim to meet the applications and serve the user industry better, the business continues to modify, adapt and improve various production processes for ensuring improvement in recovery, minimising generation of by-products, achieving a higher throughput and generating grains with higher purity and better specifications.

In Russia, in order to provide the required level of quality and production volume, the Silicon Carbide processing plant

commissioned a crushing complex which is now operational. This has enabled the plant to introduce various grit sizes in the market.

With higher sales and reduction in the losses from the South African entities, the profit before tax and interest has increased from ₹797 million to ₹1299 million on a consolidated basis.

## Key Financial Summary

₹ million

Particulars	Standalone			Consolidated		
	2015-16	2014-15	Change	2015-16	2014-15	Change
Total revenue	3127	2338	34%	7314	7275	1%
Segment results (PBIT)	335	203	65%	1299	797	63%
Capital employed	2400	1607	49%	5026	4291	17%
Share to total revenue of CUMI	24%	20%		36%	36%	
Share to segment results (PBIT) of CUMI	20%	16%		45%	37%	

## FINANCE

During the year, the Company generated ₹1236 million of cash surplus from its operations on a standalone basis.

All debts have been serviced on time. The Company's long term debt position as on 31<sup>st</sup> March 2016 stands at ₹259 million and total debt position stands at ₹1091 million. The capital expenditure program of ₹1031 million was financed largely from internal accruals. The consolidated loan funds has come down to ₹3108 million from ₹3402 million.

The credit ratings of the Company, 'A1+' for short-term borrowings and 'AA+Stable' for long-term borrowings were reaffirmed 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 ₹89 million compared to ₹87 million last year. At a consolidated level, the interest cost has come down from ₹253 million to ₹227 million.

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.

The Company's debt equity ratio continues to be healthy at 0.12 on a standalone basis and 0.26 on a consolidated basis.

There are no material changes and commitments, affecting the financial position of the Company which have occurred between 31<sup>st</sup> March 2016 and the date of this report.

## 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.

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. Annual 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 Statutory Auditors and management.

Capital and revenue expenditure are monitored and controlled with reference to approved budgets. Investment decisions are subject to formal detailed evaluation and approval according to schedule of authority in place. Review of capital expenditure undertaken with reference to benefits forecasted is done. Physical verification of assets is 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 and the adequacy/effectiveness of the Internal Control Systems in the Company.

## ADEQUACY OF INTERNAL FINANCIAL CONTROLS

The adequacy of Internal Financial Controls existing in the Company to ensure orderly and efficient conduct of its business, including adherence to the Company's policies, safeguarding of its assets, prevention and detection of frauds and errors, accuracy and completeness of accounting records and the timely preparation of reliable financial information 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;
- Implementation of sustainable solutions to Internal Audit observations;

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

## HUMAN RESOURCES

In the year 2015-16, CUMI recorded an impressive double digit growth inspite of continued uncertainty and volatility in the market. CUMI HR played a significant role in the ever demanding VUCA world in attracting right talents, nurturing and retaining them. The key HR imperatives were addressed through six strategic pillars namely building leadership pipeline, scaling up capability across the organisation, propelling performance, enhancing people productivity, improving safety performance and corporate social responsibility.

### Building Leadership Pipeline

The HiPo exercise was launched into the second orbit with the culmination of psychometric profiling and development of Individual Development Programme. The goal of the HiPo initiative is to secure long-term talent planning and ensure a strong leadership pipeline. These future leaders are taken through targeted development and succession planning techniques. The second round of talent identification has been initiated across all SBU's through an online evaluation by managers and individual assessments. To build a career path for eligible employees, a strategic initiative called Career management framework has been evolved by a committee comprising the senior leadership of CUMI. The framework provides guidelines on lateral career mobility, assessment based promotions, inter-functional movements and a well-articulated roadmap.

### Scaling up Capability

CUMI encourages employees to constantly upgrade the skills/competencies in their areas of work and supports any initiative that gives them this opportunity. The Group organised Business Leadership Programme has had many leaders from CUMI. The recently launched Young Leadership Programme for middle management also saw highest

participation from CUMI. Both these leadership programmes are running successfully and the executives upon completion will take over different roles. To enhance the technical know-how of the operation managers, the Company has extended sponsorship for Bachelors/Masters programmes in field of manufacturing technology.

### Capability Development

The Learning and Development plan was rolled out with the same rigour and attention as any other management task. At CUMI, the objective is to have a well-managed learning and development programme to enhance right skill sets and relevant knowledge to enable people to achieve operational and futuristic outcomes. The learning solutions were designed in accordance with Training Needs Analysis and besides this, SBU specific learning initiatives were designed and implemented leading to a quantum jump in the performance. CUMI leadership team and key executives were trained on the three box strategic thinking and the concept has been percolated across the organisation with a vision to identify individuals or teams to come up with breakthrough ideas and growth initiatives.

### Propelling Performance

Several initiatives on structural alignment were taken up during the year to improve the business unit efficiency and productivity. The structural changes and movement of talent between functions has given impetus to the marketing and R&D functions with competitive advantage to each SBU. Certain businesses have been strategically realigned to improve efficiencies and synergy during the year and the people transition were well addressed.

### Employee Engagement

The Engagement Survey conducted last year was instrumental in identifying the areas of disaffection. The results were shared to all stakeholders and focus groups were formed to address different drivers. Concrete plans were taken up to engage employees on parameters like care, recognition and career opportunities. The results of the dipstick survey showed significant improvement in these parameters.

### Employee Relations

Proactive steps and structured problem solving mechanisms with focus on people issues and regular communication on business related issues ensured cordial industrial relations. A purposive and positive climate was maintained throughout the year in all the manufacturing plants. A comprehensive long term settlement incorporating new productivity parameters with flexibility in operation was signed in the Abrasives and Electrominerals divisions.

## Corporate Social Responsibility

Sustainable Community Building is a guiding philosophy of the Murugappa Group. Imbibing this philosophy, CUMI which had successfully set up the CUMI Centre for Skill Development (CCSD) in Hosur a few years ago, replicated this model in Edapally during the year. These centres host over 160 students from the less privileged community in the skill building scheme and support their eventual employment. CUMI works closely with the neighbouring communities across the manufacturing plants and provide them need based support.

## Safety and Health

In a continuous effort towards maintaining a safe working environment, awareness sessions, training on usage of personal protective equipments were conducted. Identifying and eliminating unsafe working conditions were focus areas at the unit level. These dedicated efforts have resulted in reduced occurrence of accidents. All locations strive constantly towards a zero accident scenario. Initiatives on preventive health care for all employees backed by an Online Health Monitoring System has also been a constant focus area. Ongoing efforts including development of a safety manual with detailed Standard Operating Procedure and clear roles & responsibilities, near miss identification exercise, TPM implementation will take safety performance to the next level.

The Company continues its commitment to employ and empower women through various initiatives including establishing and implementing extended maternity leave policies, friendly work place policies for women etc. The Company also has a policy on prevention of Sexual Harassment at workplace in line with the requirements 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 complaints during the year.

## AWARDS & ACCOLADES

The year 2015-16 was a year of recognition for the Company in varied fields. The Super Refractories division of the Company completed 50 years and the golden jubilee celebration was graced by the presence of its esteemed customers and dealers.

The Edapally unit of Electrominerals division earned the Silver Medal for the India Green Manufacturing Challenge conducted by International Research Institute for the Manufacturing (IRIM). The Jabalpur plant of the Company was conferred the Business Excellence Award by the Jabalpur Chamber of Commerce & Industries.

As indicated earlier, the Industrial Ceramics division was recognised as one of the Top 25 Innovative organisations at the CII Innovation Awards 2015. Besides, it also received

the 5S model company award at an event organised by ABK-AOTS. The division was also recognised as the Best Supplier by ABB India Limited besides winning the golden award for Kaizen display from Quality Circle forum of India.

Besides the above, the Company participated in several exhibitions and conferences, the significant among them being the Grindtec in Augsburg, Germany and Ceramitec, Munich, Germany where it was well received. Further, the CUMI Centre for Skill Development in Edapally received the formal approval order by the State Industrial Training Department from Mr. Shibu Baby John, Minister of Labour and Rehabilitation at a function organised by the Government of Kerala on 19<sup>th</sup> May 2015.

The total staff on rolls, of the Company (including joint ventures and subsidiaries) as on 31<sup>st</sup> March 2016 was 5066 with 3225 employees in India. (Previous year 5020 with 3111 employees in India)

## PERFORMANCE OF SUBSIDIARIES

Volzhsky Abrasive Works, Russia recorded net sales growth over the previous year from RUB 3428 million to RUB 4284 million due to improvement in sales volumes of Silicon Carbide and higher realisation due to exports. The entity had the highest ever fusion volumes surpassing last year levels. The sales of Refractories improved due to robust order book and costlier imports. Abrasives sales remained at around the same level. The Abrasives consumption in Russia declined this year due to the economic recession and contraction in the economic activity. On the profitability front, despite hike in power rate on the back of price gain from exports, the entity registered an increase in profitability (after tax) from RUB 438 million to RUB 686 million.

Foskor Zirconia, South Africa recorded net sales of Rand 192 million compared to Rand 197 million last year. The entity's profit after tax improved from last year's loss of ZAR 8 million to a profit of ZAR 13 million.

In CUMI Australia, the business in lined equipment continued to be good. Net sales grew from AUD 15.44 million to AUD 16.2 million. Profit after tax remained same at last years' level of AUD 1.8 million.

Sterling Abrasives had a net sales of ₹620 million, compared to the last years' net sales of ₹625 million. Profit after tax dropped from ₹54 million to ₹52 million on account of higher depreciation arising out of capacity expansion. The user industry comprises majorly of agro polishing industry.

CUMI Abrasives and Ceramics Company, the Chinese subsidiary had a net sales of CNY 27 million for the year, which was lower than the last year's level of CNY 33 million. The loss was CNY 20 million against a loss of CNY 13 million in the last financial year. As part of the restructuring initiatives in China, the manufacturing operations have been discontinued and

a new business model for the future business operations is being established.

The net sales of CUMI America recorded a good growth (USD 5.1 million from USD 4.5 million), driven mainly by the increase in sales of both Bonded Abrasives and Industrial Ceramics. The losses were in the levels of USD 0.8 million as against a loss level of USD 0.6 million in FY 2014-15. During the year, consequent to the consolidation of its operations with CUMI America, CUMI Canada was legally wound up and hence ceased to be a subsidiary of the Company.

For CUMI Middle East, net sales almost remained flat at USD 2 million owing to a tepid Middle East market. Profits for the year reduced from USD 0.15 million to a loss of 0.16 million.

During the year CRIL was merged with the Company and its operations were integrated with Electromineral operations. Therefore, CRIL ceased to be a subsidiary of the Company. Consequently financial results of the entity forms part of the Electromineral standalone numbers.

Southern Energy Development Corporation Limited (SEDCO), the gas based power generation subsidiary, recorded a net sales of ₹219 million as against ₹180 million last year due to improved supply in gas from Oil and Natural Gas Corporation. Profits after tax substantially grew from ₹7 million to ₹23 million due to favourable gas price.

Net Access India, which provides IT facilities management and other allied services increased its net sales from ₹252 million to ₹296 million. Profits after tax grew from ₹15.9 million to ₹16.7 million. The business has introduced new service offerings and is increasing the share of its external customers.

Thukela Refractories Isithebe, South Africa, recorded a net sales of Rand 0.8 million as compared to Rand 77 million last year. The drop in net sales was due to winding down of its operations. The loss levels subsequent to the exit has come down from Rand 54 million to Rand 14 million and its closure is in the final stages.

CUMI International Limited, Cyprus recorded a revenue of USD 3.2 million representing mainly dividend income, as against last year income of USD 4.8 million.

CUMI Europe s.r.o, based out of Europe, to serve the European markets better with products and services of CUMI group, had a turnover of CZK 7.9 million. Loss levels were at CZK 3.7 million. The entity is in the process of establishing its business presence.

Performance of joint ventures are given in note no. 42 of the standalone financials.

Consolidated financial statements (incorporating the financial results of the Company, its subsidiaries and joint ventures) have been provided in the Annual Report. Other than the joint ventures, there are no associate 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 attached.

## RISKS, CONCERNS AND THREATS

Pursuant to the requirements of the Listing Regulations and the Companies Act, 2013 the Company has constituted a Risk Management Committee. The details of 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. Risk management forms an integral part of the Company's Business Plan.

The key business risks identified by the Company and its mitigation plans are as under:

Over the past few years, the Company has acquired various technologies. Delay in successful conversion of the technology and application knowledge to profitable business model may lead to an adverse impact on the return on investments. Proper training of application team, collaborator's guidance, product validation at the user's end and leveraging the external expertise are some of the mitigating efforts the Company continues to pursue.

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. Such new technologies in the related space as also in adjacencies are continuously tracked and monitored. The Company seeks to address these technology gaps through continuous benchmarking the existing manufacturing processes with developments in the industry and in this connection has made arrangements with technical research institutions and technology consultants. The in-house Research and Development teams which have been strengthened over years are working on various state of the art projects.

The Company manufactures various products which results in exposure to numerous raw materials. Risks associated with raw material availability, threat of substitutes and supplier

concentricity could impact the quality and timely delivery of finished products. The risks are mitigated to include alternative sources after thorough testing and evaluation.

Underutilisation of capacities may affect the performance of the Company going forward. The Company is ramping up its marketing efforts towards successful product establishment and market acceptance of the products, exploring development of alternate products and establishing a range of applications.

This year, the Company has relocated capital projects from South Africa to India. The relocated projects are in various stages of installation and commissioning and any delay in timelines would affect the successful ramp up of business volumes. The products produced in those relocated facilities would have to be quality compliant, exhibit product consistency, gain customer acceptance and be compliant to user industry requirements. Any delay in successful production or acceptance of the product, will impact timely capacity utilisation of these projects.

Considering Electromineral products are produced by way of fusion process which consumes lot of electricity, power cost remains one of the key lever which can favourably or adversely affect our profitability based on the changes in the electricity cost. Our manufacturing facilities are located in diverse geographies with differing power rates adopted and driven by the local laws and policies. Apart from pricing, in some locations, availability of power becomes a constraint. In order to mitigate this threat, the Company continues to liaise with the local regulatory bodies and local Government. The Company also constantly strives to bring about technological changes in its manufacturing processes which leads to lower power consumption. Getting access to captive power and creating facilities for captive power generation continues to be a vital strategy of CUMI, as can be exhibited from Maniyar and SEDCO.

Fuel cost increase is another area of concern. Petroleum based products are used, either as direct raw material or as 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. Last two years, however, the Company was favourably impacted owing to the global cool off in oil prices.

The Company deals with multiple currencies and is thus exposed to translation risk on account of adverse currency movements. In the last two years, rouble depreciation has impacted our consolidated topline growth. The Company has taken steps to maximise profitability.

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.

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

According to the World Economic Outlook - January 2016 of the International Monetary Fund (IMF), global growth is forecast at 3.4 per cent in 2016. The pickup in global activity is projected to be gradual. The slowdown and rebalancing of the Chinese economy, lower commodity prices, and strains in certain large emerging market economies will continue to weigh on growth prospects in 2016-17.

As far as India is concerned, while public investment and urban consumption were the major drivers of growth in FY 2015, revival of private investment and rural consumption is critical if growth is to remain strong in FY 2016. As per Asian Development Bank, growth is projected at 7.4 per cent in FY 2016, marginally lower than the 7.6 per cent achieved in FY 2015 as the expected decline in external demand offsets a pickup in domestic demand. Moreover, the weak balance sheets of public sector banks will hamper lending and growth prospects. Growth is expected to pick up a bit to 7.8 per cent in FY 2017, helped by the Government's strengthening of public sector banks' capital and operations, private investments benefitting from corporates delivering results, the financing of stalled projects and an uptick in bank credit.

A revival in domestic growth would result in kick starting several postponed projects in steel, power, glass, cement, insulation and general engineering industry which would help the Company to register a good growth. The Company expects a good growth in revenue in the backdrop of positive macroeconomic factors considering favourable investment climate, perceived ability of new Government to push structural reforms like fast track clearance for infrastructure projects, GST, energy related reforms, controlled fiscal deficit and normalisation of current account deficit.

The demand for Abrasives is ever increasing owing to opportunities arising out of global mega trends. Indian growth story is one of the key triggers for multinational companies to increase its presence in this region. This throws a different challenge for CUMI Abrasives to cope up with international competition to protect its market share and meet the futuristic demand through high performance products and deliver sustainable profitable growth.

Rapid urbanisation and resultant growth in infrastructure, construction and auto industry would be the key market

driver for Indian Abrasives consumption. Higher productivity and success of 'Make in India' initiative is also expected to favourably impact the Abrasives market.

Globally, marketing entities are spread across Middle East, Europe, China and North America. The growth in Middle East is likely to come from higher spend on infrastructure and shift towards a non-oil economy and open industrialisation. In China, high speed rail network projects and creation of satellite towns is likely to expand the market.

Emergence of Central and Eastern Europe as automotive hubs is expected to lead to upsurge in economic activity. In North America, increased prevalence of metal fabrication and revival in housing market will result in revenue growth for the Company.

The Company will continue to pursue efforts to control costs. In this year, the Company spent majority of its capital expenditure towards relocation projects. Considering the facilities that have been expanded over the last years, the Company would invest majorly in maintenance in the forthcoming year. With most of the facilities running at moderate utilisation levels, higher sales is expected to result in significant leverage leading to better results next year.

## 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					
Sl. No	Description	As on 31.03.2015	Additions	Deletions	As on 31.03.2016
1	Loans given by the Company	44.20	-	44.20	-
2	Corporate Guarantee given by the Company	3224.66	59.70	674.42	2609.93
3	Investments made by the Company	2375.00	205.98	134.63	2446.36

## 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 omnibus approval of the Committee is obtained on a quarterly basis for transactions which are of foreseen and repetitive nature. The statement containing the nature and value of the transactions entered into during the quarter is presented at every meeting by the Chief Financial Officer for the review and approval of the Committee. Further, transactions proposed to be entered in subsequent quarter are also presented. Additionally, details of transactions proposed to be entered into with Related Parties on an annual basis are placed before the committee at the commencement of the financial year. 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 has been uploaded and 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 has 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, 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.

In addition, 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. The Company also actively pursues local community assistance programmes in and around its plant and office locations.

The Company headquartered in Chennai and which has three of its Abrasives plants operating in and around Chennai despite being affected by the floods in December 2015, not only kept its factories running continuously but in the quintessential CUMI-way helped the community at large through supply of food packets and other necessities to highly impacted areas. The Company supplied water draining motors to schools inundated in the rains as well as food and safe drinking water to the authorities and volunteers engaged in the relief work. The energetic employees of the Company, regardless of the personal suffering they were undergoing during the floods quickly formed rescue teams and assisted in the evacuation activities. The Company also procured and administered cholera preventive medicines to its employees and their families.

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.

## GOVERNANCE

### Board of Directors and Key Managerial Personnel

The Board of the Company comprises eight Directors of which majority (six) are independent. During the year, Mrs. Bharati Rao, was appointed as an Independent Director under Section 149 of the Companies Act, 2013 at the 61<sup>st</sup> Annual General Meeting by the shareholders for a term of 4 years.

Mr. M M Murugappan, retires by rotation at the forthcoming Annual General Meeting and being eligible has offered himself for re-appointment. Approval of the members is being sought at the ensuing Annual General Meeting for his re-appointment and the requisite details in this connection is contained in the Notice convening the meeting and the Corporate Governance Report.

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, Mr. Sridharan Rangarajan, Chief Financial Officer and Mrs. Rekha Surendhiran, Company Secretary continue to be the Key Managerial Personnel of the Company as per Section 203 of the Companies Act, 2013 and there were no changes during the year.

### Board Meetings

During the year, eight 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 & Remuneration Committee. Structured questionnaires were used in the overall Board evaluation comprising various aspects of the Board's functioning in terms of structure, governance and dynamics of 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.

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 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 and the Non-Independent Directors was carried out by the Independent Directors at their separate meeting.

### 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 of the Company 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 CUMI. 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 of CUMI comprises only Independent Directors. Mr. T L Palani Kumar is the Chairman and the other members are Mr. M Lakshminarayan, Mr. Sanjay Jayavarthanavelu and Mrs. Bharati Rao. During the year, five Audit Committee Meetings were held, the details of which are provided in the Corporate Governance Report.

### Statutory Auditors

M/s. Deloitte Haskins & Sells, Chartered Accountants, (FR No. 008072S) Chennai were appointed as Auditors of the Company at the 60<sup>th</sup> Annual General Meeting to hold office upto the conclusion of the 62<sup>nd</sup> Annual General Meeting subject to annual ratification by the General Body. Their office as Auditors will expire at the conclusion of the ensuing Annual General Meeting.

M/s. Deloitte Haskins & Sells have offered to continue as Auditors of the Company for one more year and have furnished their consent in this regard. In view of the transition period provided in Section 139 of the Companies Act, 2013 read with the Companies (Audit and Auditors) Rules, 2014, they are eligible to continue as Auditors for one more year and accordingly with the recommendation of the Audit Committee, the consent of the shareholders is being sought at the ensuing Annual General Meeting for their appointment as Statutory Auditors from the conclusion of the 62<sup>nd</sup> Annual General Meeting till the conclusion of the 63<sup>rd</sup> Annual General Meeting at a remuneration of ₹4200000 excluding out of pocket expenses incurred during the audit and applicable service taxes.

The Auditors have confirmed their eligibility under Section 141 of the Companies Act, 2013 and the Rules framed thereunder for continuation of their term. Further, as required under Regulation 33 of the Listing Regulations, they have also 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 the Auditors on the financial statements of the Company 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, 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.

Your Directors, 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 2015-16 on a remuneration of ₹400000. Further, the said firm has also been appointed to conduct the cost audit for the FY 2016-17 at the same remuneration.

The Companies Act, 2013 mandates that the remuneration payable to the Cost Auditor is ratified by the members and accordingly a resolution seeking the member's ratification of the remuneration payable to the Cost Auditors is included in the Notice convening the 62<sup>nd</sup> 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 2015-16. The report of the Secretarial Auditor is annexed to and forms part of this Report (refer Annexure E). 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 the Statutory Auditors confirming compliance is annexed to and forms an integral part of this Report.

## CEO/CFO Certificate

The Managing Director and the Chief Financial Officer have 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 31<sup>st</sup> March 2016, applicable accounting standards have been followed and no material departures have been made from the same;
- the accounting policies mentioned in Note 2 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 D).

## 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 as Annexure B and forms part of this Report.

## 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's operations in future.

## 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 C).

Further, the disclosures relating to employees stock options as per Securities and Exchange Board of India (Share based Employees Benefits) Regulations, 2014 read with the guidelines issued by SEBI on 16<sup>th</sup> June 2015 has been provided on the Company's website and is available in the link <https://www.cumi-murugappa.com/policies.html>. The Company's ESOP Scheme of 2007 governs the grant of options to employees. During the year 2015-16, there were no changes made to the Scheme. Further, no fresh options have been granted under the Scheme since February, 2012.

## ACKNOWLEDGEMENT

The Board gratefully acknowledges the cooperation 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, 2016

**M M Murugappan**  
Chairman



# Annexures to the Report of the Directors

Given as required under Section 134 of the Companies Act, 2013 and the Companies (Accounts) Rules, 2014 and Companies (Appointment & Remuneration of Managerial Personnel) Rules, 2014. All information furnished relates to Carborundum Universal Limited, India as a standalone entity.

## ANNEXURE A

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

- 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.

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.  
<https://www.cumi-murugappa.com/policies.html>
- Website link where the CSR policy is uploaded  

<https://www.cumi-murugappa.com/policies.html>
- The Composition of the CSR Committee  

Mr. Shobhan M Thakore, Chairman (Independent Director)  
 Mr. Aroon Raman (Independent Director)  
 Mr. K Srinivasan (Managing Director)
- Average net profit of the Company for last three financial years  

₹937.27 million
- Prescribed CSR Expenditure (two per cent of the amount as in item 3 above)  

₹18.75 million
- Details of CSR spent during the financial year  
 (a) Total amount spent for the financial year  

₹22.06 million

 (b) Amount unspent, if any  

Nil

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

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	11.44	13.88	13.88	Direct
2.	Grant to Valliammai Achi Hospital	Health	Kadalumoodu, Kanyakumari District	1.10	1.10	1.10	Agency
3.	Grant to Vellayan Chettiar Higher Secondary School (VCHSS)	Education	Thiruvottiyur, Chennai District	8.27	7.08*	7.08*	Agency
<b>Total</b>				<b>20.81</b>	<b>22.06</b>	<b>22.06</b>	

Agency: AMM Foundation

\* Grant made during the year for VCHSS was ₹8.27 million as against which a sum of ₹7.08 million was utilised by the implementing agency as of 31<sup>st</sup> March 2016 (therefore the total CSR incurred was ₹23.25 million for the year).

Note: In addition to the above, during the year 2015-16, the Company contributed ₹ 7.5 million to the Chief Minister's Relief Fund for providing relief to the victims of the heavy rains and resultant floods in Tamil Nadu.

7. Reasons for shortfall in spend: NA

8. The implementation and monitoring of CSR Policy for the FY 2015-16 is in compliance with the CSR objectives and Policy of the Company.

Chennai  
 May 4, 2016

On behalf of the Board  
**K Srinivasan** **Shobhan M Thakore**  
 Managing Director Chairman - CSR Committee

## ANNEXURE B

### I. ENERGY CONSERVATION

The energy conservation measures undertaken during the year were in the nature of identifying and optimising the power consumption in the various power intensive equipments, modifying the manufacturing process, replacement 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. Suitable vendor for supply of solar power equipments for lighting of office in certain production facilities were identified. LED lightings and boiler flue gas excess air control were installed. Material lifts were modernised. On/off timer for street lights were introduced.

Savings in fuel consumption for kilns were achieved by modification in kilns, installation of energy efficient VFD blowers. Usage of alternate fuels like biodiesel etc. were pursued which led to reduction in fuel costs.

The Company was able to achieve considerable savings due to the above energy saving measures implemented across divisions. Further, energy savings was achieved by prudent sourcing of power from exchanges.

During the year ended 31<sup>st</sup> March 2016, a capital investment of ₹10.51 million was made on energy conservation equipments across the various SBU's.

### II. TECHNOLOGY ABSORPTION

Efforts made towards technology absorption, adaptation and innovation:

In 2015-16, utilisation of high performance grains was taken as the major focus area which enabled the products to be used extensively in various niche products and critical applications. Successful market establishment of the high performance products was completed in FY 2015-16, resulting in market share gains, both in Indian market and in the International market. Further, the business also developed modified versions of key raw material inputs, particularly resins, which resulted in significant improvement in the performance of grinding wheels.

A technology agreement was inked in the area of metallization process. The business also explored the various casting and moulding technologies. Stabilisation of production process of light weight Refractory materials pursued with modification in the cooling and monitoring systems. Grain recovery improvement projects and by-products recycling projects were undertaken by the Electrominerals division.

Technology absorption continued for making reinforced composite products for applications in power and chemical industries.

Benefits derived as a result of the above efforts:

Products were established for various grinding applications in foreign markets. Market share for select products improved in various user industries. New industries and markets were targeted through new generation bond and resins. High Performance belts and discs were established across various applications in the domestic and international markets. New products were established for auto after market. New moulding and casting technologies enabled the business to produce thin film products. Exports increased and product acceptances concluded owing to the changes made in the product ingredients.

Imported technology:

No new technology was imported during the year. The details of the technology imported in the last three years reckoned from the beginning of FY 2015-16 are:

Technology imported	Rubber center-less	Roll Grinding wheel	High temp ultra-lite Refractory products
Year of import	2012-13	2014-15	2012-13
Has technology been fully absorbed	Yes	Yes	Yes
If not fully absorbed, areas where this has not taken place, reasons therefor and future plans of action.	-	-	-

### III. EXPENDITURE ON RESEARCH & DEVELOPMENT

Research and Development (R&D) efforts during the year continued to focus on new product/applications development. The R&D centres of the Company at Thiruvottiyur and Hosur were approved in the form of renewal of recognition by the Department of Science and Industrial Research (DSIR), Government of India. During the year, an application was submitted to DSIR for recognising the in-house R&D facility at Kalamassery, Cochin. We also have an in-house R&D facility at Ranipet.

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.

## EXPENDITURE ON R & D

	₹ million
Capital (including CWIP)	17.28
Recurring	81.99
Total	99.27
Total expenditure as a percentage to net sales	0.77%

## IV. FOREIGN EXCHANGE EARNINGS AND OUTGO

	₹ million	
Particulars	2015-16	2014-15
Foreign Exchange Earnings	2951	2391
Foreign Exchange Outgo		
- Revenue	2893	2472
- Capital	409	42

## ANNEXURE C

### STATEMENT OF EMPLOYEES' REMUNERATION

A. The details of employees who were paid remuneration in excess of ₹500000 per month or ₹6 million per annum during 2015-16 as per Rule 5(2) of the Companies (Appointment and Remuneration of Managerial Personnel) Rules, 2014 are as follows:

Name and Age	Designation/Nature of duties	Gross remuneration paid (₹)	Qualification and experience (years)	Date of commencement of employment	Previous employment
1	2	3	4	5	6
Muthiah M (56)	Executive Vice President, Human Resources	7307825	M.A (SW) and PG Dip. in Management (32)	15.10.2003	Plant HR Head, Hyundai Motor India Limited
Ananthaseshan N (53)	President, Abrasives	8934190	M.Sc (Applied Science), M.Tech Material Science (30)	19.02.1986 <sup>(e)</sup>	-
Sridharan Rangarajan (50)	Chief Financial Officer	8283055	B.Com, ACA, Grad CWA (30)	22.06.2011	CFO, Indian Operations - TIMKEN
Rajagopalan R (57)	Executive Vice President, Refractories & Prodorite	8103295	B.E. (Mech), MBA (Oubs) (36)	01.10.1980 <sup>(e)</sup>	-
Srinivasan K (58)	Managing Director	17224924	B.Tech (Mech) (36)	30.01.2002	Vice President Wendt (India) Limited

#### Notes:

- Remuneration as 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. The Employee Stock Options granted to employees in the earlier period are accounted based on intrinsic value, as permitted by applicable SEBI Regulations. Since options are granted at the closing market price prior to date of grant, the intrinsic value is nil.
- The employment of the above persons is whole time in nature and terminable with 3 months' notice on either side.
- Mr. K Srinivasan was re-appointed as the Managing Director by the Board from 01.02.2015 till 22.11.2017 with the approval of shareholders at the 61<sup>st</sup> Annual General Meeting. He is subject to the service conditions of the Company.
- 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.
- Date of joining as graduate engineer trainee.
- The remuneration details are for the year 2015-16 and all other particulars are as on 31<sup>st</sup> March 2016.

B. The details of remuneration during the year 2015-16 as per Rule 5(1) of the Companies (Appointment and Remuneration of Managerial Personnel) Rules, 2014 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
M M Murugappan	Chairman	25.35
T L Palani Kumar	Independent Director	2.71
M Lakshminarayan	Independent Director	2.85
Shobhan M Thakore	Independent Director	2.28
Sanjay Jayavarthanavelu	Independent Director	2.41
Aroon Raman	Independent Director	2.27
Bharati Rao	Independent Director	2.66
K Srinivasan	Managing Director	38.37

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

Name	Designation	Increase(%)
M M Murugappan	Chairman	33.36
T L Palani Kumar	Independent Director	3.30
M Lakshminarayan	Independent Director	5.50
Shobhan M Thakore	Independent Director	(0.54)
Sanjay Jayavarthanavelu	Independent Director	4.84
Aroon Raman	Independent Director	(2.14)
Bharati Rao*	Independent Director	NA
K Srinivasan	Managing Director	7.14
Sridharan Rangarajan	Chief Financial Officer	22.92
Rekha Surendhiran	Company Secretary	13.27

\* Joined during 2014-15 hence not comparable

Notes:

- During the year, eight Board meetings of the Company were held. The increase in remuneration of the Non-Executive Independent Directors is on account of sitting fees paid for attending the meetings.
- Sitting fee is paid based on attendance of the Non-Executive Director. Decrease percentage in remuneration of Non-Executive Directors is on account of non-participation at certain meetings.

- Mr. K Srinivasan's remuneration for the year includes an unavailed LTA component of FY 2013-14 received during the year. This has been appropriately factored in while computing the increase % above.

- During the year, there was a grade change for Mrs. Rekha Surendhiran. Further, the remuneration received by her during the year includes an unavailed LTA component for the FY 2013-14 and FY 2014-15 which have been appropriately factored in while computing the increase % above.

(iii) Percentage increase in the median remuneration of employees in the financial year: 10.19 per cent. (employees who were in employment for the whole of FY 2014-15 & whole of FY 2015-16 considered for this purpose).

(iv) Number of permanent employees on the rolls of the Company as on 31<sup>st</sup> March 2016: 2020.

(v) Explanation on relationship between average increase in remuneration & Company performance (standalone):

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.

The average increase in employee remuneration effected during the year 2015-16 was 7.80 per cent. This increase is based on the Company's performance in the preceding financial year, their individual performance as well as other external factors such as inflation, industry standards etc. The Company's performance for the year 2015-16 increased by 11.18 per cent in terms of revenue from operations, the profits before tax and exceptional income increased by 48.74 per cent and the market capitalisation decreased by 6.72 per cent as compared to the previous year.

(vi) Comparison of the remuneration of the Key Managerial Personnel and each Key Managerial Personnel against the performance of the Company:

	₹ million
Aggregate remuneration of Key Managerial Personnel (KMP) in FY 2015-16	28.84
Revenue from operations for the year 2015-16	12993
Remuneration of KMPs (as a % of revenue)	0.22%
Profit before tax and exceptional income for the year 2015-16 (PBT)	1673
Remuneration of KMPs (as a % of PBT)	1.72%

₹ million

Particulars	K Srinivasan Managing Director	Sridharan Rangarajan Chief Financial Officer	Rekha Surendhiran Company Secretary
Remuneration in FY 2016	17.23	8.28	3.33
Revenue from operations for the year 2015-16		12993	
Remuneration as a % of revenue	0.13%	0.06%	0.03%
PBT for the year 2015-16		1673	
Remuneration as a % of PBT	1.03%	0.50%	0.20%

- (vii) Variations in the market capitalisation of the Company and price earnings ratio as at the closing date of the current financial year and previous financial year:

Particulars	31.03.2016	31.03.2015
Market Capitalisation of the Company (₹ million)	33060.6	35443.5
Closing Price at the BSE Ltd. (in ₹)	175.50	188.35
Closing Price at the National Stock Exchange Ltd. (in ₹)	175.45	190.20
Price Earnings Ratio as at the closing date	28.42	23.87

- (viii) Percentage increase over decrease in market quotations of the shares of the Company in comparison with the last public offer: The last public offer was made in 1994 and the data is incomparable.
- (ix) The average percentile increase already made in the salaries of employees other than the managerial personnel in the last financial year is 7.80 per cent and the average percentage increase in the managerial remuneration is 17.57 per cent (employees who were in employment for whole of FY 2014-15 and whole of FY 2015-16 considered for this purpose).

The increase in employees remuneration is based on the parameters referred in earlier paras. This

also applies to the Managing Director. The increase in Managerial remuneration (other than MD) is on account of increase in sitting fees paid to the Independent Directors during the year consequent to more number of Board meetings held during the year as well as increase in commission payable to Chairman due to improved performance of the Company.

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.

- (x) Key parameters for variable component of remuneration of Directors

**Managing Director:** The remuneration of Managing Director includes annual incentive component at 100 per cent levels. The actual payment in the year is linked to the Company's performance in the previous financial year based on qualitative and quantitative factors and is paid as determined by the Nomination and Remuneration Committee.

**Other Directors:** The remuneration of Non-Executive Directors comprises sitting fees and commission. Sitting fees is paid based on the attendance at Board/Committee meetings. Differential fee structure exists for Board and its Committees. Also, based on the terms of reference of the Committee, different sitting fee structure exists among the Committees.

Commission to Non-Executive Directors is subject to a maximum of 1% of net profits of the Company. In keeping with evolving trends in industry, the practice of paying differential commission to Directors based on time spent by them has also been adopted. Further details regarding the remuneration of Directors is available in the Corporate Governance report.

- (xi) Ratio of remuneration of the highest paid Director to that of the employees who are not Directors but receive remuneration in excess of the highest paid Director during the year: Not Applicable.
- (xii) 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.

# Extract of Annual Return

## ANNEXURE D

**Form No. MGT-9**  
**EXTRACT OF ANNUAL RETURN**  
**as at the Financial Year ended on 31<sup>st</sup> March 2016**

[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 Tel: +91-44-30006161 Fax: +91-44-30006149 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 Unit: Carborundum Universal Limited Karvy Selenium Tower B, Plot 31-32, Gachibowli Financial District, Nanakramguda, Hyderabad 500032 Tel: +91-40-67162222 Fax: +91-40-23001153 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	56.62
2	Ceramics	23939	24.77
3	Electrominerals	00729	18.61

\* Does not include inter-segment sales

## Extract of Annual Return (Continued)

### 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
<b>Direct holding</b>					
1	Net Access India Limited Parry House, 43 Moore Street, Chennai - 600 001	U74999TN1997PLC039545	Subsidiary	100.00	2(87)(ii)
2	Southern Energy Development Corporation Limited "Parry House" VI Floor, 43 Moore Street, Chennai - 600 001	U40100TN1985PLC012425	Subsidiary	84.76	2(87)(ii)
3	Sterling Abrasives Limited Plot No 45/46 G I D C Industrial Estate, Odhva Road Ahmedabad - 382 415	U29259GJ1979PLC003467	Subsidiary	60.00	2(87)(ii)
4	CUMI International Limited 284 Arch. Makarou III Ave. Fortuna Court, 2 <sup>nd</sup> Floor, 3105 Limassol Cyprus	Company Incorporated outside India	Subsidiary	100.00	2(87)(ii)
5	CUMI(Australia) Pty. Limited Level 1, 56 Hudson Street, Hamilton NSW 2303	Company Incorporated outside India	Subsidiary	51.22	2(87)(ii)
<b>Holding through CUMI International Limited (a wholly owned subsidiary)</b>					
6	Volzhsky Abrasives Works 404130 Volzhsky, Volgograd Region, Autodoroge 6, Russia	Company Incorporated outside India	Subsidiary	98.07	2(87)(ii)
7	Foskor Zirconia (Pty)Limited PO Box. 1, Phalaborwa, South Africa, 1390	Company Incorporated outside India	Subsidiary	51.00	2(87)(ii)
8	CUMI America Inc 7310 Turfway Road, Ste 550, Florence Kentucky 41018 USA	Company Incorporated outside India	Subsidiary	100.00	2(87)(ii)
9	CUMI Middle East FZE No. 313, BC - 3 PO Box. 16190, RAK FZE Trade Zone, Ras Al Khaimah, United Arab Emirates	Company Incorporated outside India	Subsidiary	100.00	2(87)(ii)
10	CUMI Abrasives & Ceramics Company Limited South of Guihua Road, East of Donghuan Road, Yanjiao Development Zone, Sanhe City, Hebei Province, P.R., China, 065201	Company Incorporated outside India	Subsidiary	100.00	2(87)(ii)
11	Thukela Refractories Isithebe Pty Ltd. No. 1 Yellow Street, Isithebe, South Africa	Company Incorporated outside India	Subsidiary	100.00	2(87)(ii)
12	CUMI Europe s.r.o Bucharova 2657/12 bld c 158000 Prague, Czech Republic	Company Incorporated outside India	Subsidiary	100.00	2(87)(ii)
<b>Joint Ventures</b>					
13	Murugappa Morgan Thermal Ceramics Limited PBNO 1570 ,Dare House Complex 5 <sup>th</sup> Floor Extn, 2, NSC Bose Road, Chennai - 600 001	U26919TN1982PLC009622	Joint Venture	49.00	2(6)
14	Ciria India Limited P-11 Pandav Nagar, Mayur Vihar Phase-1 New Delhi - 110 001	U74899DL1997PLC091417	Joint Venture	30.00	2(6)
15	Wendt (India) Limited 105, 1 <sup>st</sup> Floor, Cauvery Block, National Games, Housing Complex, Koramangala, Bangalore - 560 047	L85110KA1980PLC003913	Joint Venture	39.87	2(6)

# Extract of Annual Return (Continued)

## 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 (1 <sup>st</sup> April 2015)				No. of shares held at the end of the year (31 <sup>st</sup> March 2016)				% change during the year
		Demat	Physical	Total	% of total shares	Demat	Physical	Total	% of total shares	
<b>A. Promoters</b>										
<b>(1) Indian</b>										
a)	Individual/HUF	7611638	-	7611638	4.04	7834038	-	7834038	4.16	0.11
b)	Central/State Govt(s)	-	-	-	-	-	-	-	-	-
c)	Bodies Corporate	58946944	-	58946944	31.32	58946944	-	58946944	31.29	(0.03)
d)	Banks/FI	-	-	-	-	-	-	-	-	-
	Sub-total (A) (1)	66558582	-	66558582	35.37	66780982	-	66780982	35.45	0.08
<b>(2) Foreign (A) (2)</b>										
	Total shareholding of Promoter (A)=(A)(1)+(A)(2)	66558582	-	66558582	35.37	66780982	-	66780982	35.45	0.08
<b>AA. Promoter Group</b>										
	Individuals/HUF (AA)(1)	6314554	-	6314554	3.36	6482904	-	6482904	3.44	0.09
	Bodies Corporate/ others (AA)(2)	9287320	-	9287320	4.94	9287320	-	9287320	4.93	(0.01)
	Total shareholding of Promoter Group (AA) = (AA)(1)+(AA)(2)	15601874	-	15601874	8.29	15770224	-	15770224	8.37	0.08
	Total shareholding of Promoter & Promoter Group (A)+(AA)	82160456	-	82160456	43.66	82551206	-	82551206	43.82	0.16
<b>B. Public Shareholding</b>										
<b>(1) Institutions</b>										
a)	Mutual Funds	20347722	-	20347722	10.81	22884439	-	22884439	12.15	1.34
b)	Banks/FI	55220	-	55220	0.03	27322	-	27322	0.01	(0.01)
c)	Central/State Govt(s)	-	-	-	-	-	-	-	-	-
d)	Venture Capital Funds	-	-	-	-	-	-	-	-	-
e)	Insurance Companies	6832723	-	6832723	3.63	6412479	-	6412479	3.40	(0.23)
f)	FII's	38431139	3000	38434139	20.42	37231286	3000	37234286	19.77	(0.66)
	Sub-total (B)(1)	65666804	3000	65669804	34.90	66555526	3000	66558526	35.33	0.44
<b>2) Non-Institutions</b>										
<b>a) Bodies Corporate</b>										
i)	Indian	5790010	141130	5931140	3.15	6366011	141130	6507141	3.45	0.30
ii)	Overseas	-	-	-	-	-	-	-	-	-
<b>b) Individuals</b>										
i)	Shareholders holding nominal share capital upto ₹1 lakh	20971392	3784550	24755942	13.16	20310170	3464579	23774749	12.62	0.53
ii)	Shareholders holding nominal share capital in excess of ₹1 lakh	7458538	140460	7598998	4.04	6692796	140460	6833256	3.63	0.41
<b>c) Others</b>										
i)	Clearing members	18559	-	18559	0.01	26262	-	26262	0.01	0.00
ii)	NRI	2000573	41660	2042233	1.09	2089530	31260	2120790	1.13	0.04
iii)	Trusts	1910	-	1910	0.00	7230	-	7230	0.00	(0.00)



## Extract of Annual Return (Continued)

Sl. No.	Category of Shareholders	No. of shares held at the beginning of the year (1 <sup>st</sup> April 2015)				No. of shares held at the end of the year (31 <sup>st</sup> March 2016)				% change during the year
		Demat	Physical	Total	% of total shares	Demat	Physical	Total	% of total shares	
iv)	NBFCs registered with RBI	-	-	-	-	400	-	400	-	-
	<b>Sub-total (B)(2)</b>	36240982	4107800	40348782	21.44	35492399	3777429	39269828	20.85	(0.60)
	Total Public Shareholding (B)=(B)(1)+ (B)(2)	101907786	4110800	106018586	56.34	102047925	3780429	105828354	56.18	(0.16)
<b>C.</b>	<b>Shares held by Custodian for GDRs &amp; ADRs</b>	-	-	-	-	-	-	-	-	-
	<b>Grand Total (A+B+C)</b>	184068242	4110800	188179042	100.00	184599131	3780429	188379560	100.00	-

The 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

### (ii) Shareholding of Promoters

Sl. No.	Name of the Promoter	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	420280	0.22	0.11	420280	0.22	0.00	(0.00)
2	M V Subbiah	514294	0.27	-	514294	0.27	0.00	(0.00)
3	M A Alagappan	1274400	0.68	0.22	1274400	0.68	0.00	(0.00)
4	A Vellayan	303260	0.16	0.03	303260	0.16	0.03	(0.00)
5	A Venkatachalam	598900	0.32	0.03	598900	0.32	0.03	(0.00)
6	M M Murugappan	696340	0.37	-	696340	0.37	0.00	(0.00)
7	M M Venkatachalam	449400	0.24	0.24	449400	0.24	0.24	(0.00)
8	M A M Arunachalam	1100600	0.58	0.03	1100600	0.58	0.16	(0.00)
9	S Vellayan	694544	0.37	-	694544	0.37	0.00	(0.00)
10	Arun Alagappan	471400	0.25	-	471400	0.25	0.01	(0.00)
11	V Arunachalam	183740	0.10	-	183740	0.10	0.00	(0.00)
12	V Narayanan	205900	0.11	-	205900	0.11	0.00	(0.00)
13	M M Muthiah	234000	0.12	-	289600	0.15	0.00	0.03
14	M M Veerappan	234000	0.12	-	289600	0.15	0.00	0.03
15	Arun Venkatachalam	186840	0.10	-	186840	0.10	0.00	(0.00)
16	M V Subramanian	24320	0.01	-	79920	0.04	0.00	0.03
17	M V Muthiah	19420	0.01	-	75020	0.04	0.00	0.03
18	Murugappa Holdings Ltd.	55432284	29.46	-	55432284	29.43	0.00	(0.03)
19	Ambadi Investments Pvt. Ltd.	3121960	1.66	-	3121960	1.66	0.00	(0.00)
20	Ambadi Enterprises Ltd.	384700	0.20	-	384700	0.20	0.00	(0.00)
21	Tube Investments of India Ltd.	6000	0.00	-	6000	0.00	0.00	(0.00)
22	E.I.D.Parry (India) Ltd.	2000	0.00	-	2000	0.00	0.00	(0.00)
23	New Ambadi Estates Pvt. Ltd.	-	-	-	-	-	-	-
24	Coromandel International Ltd.	-	-	-	-	-	-	-
25	Murugappa & Sons (M V Murugappan, M A Alagappan & M M Murugappan hold shares on behalf of the Firm)	-	-	-	-	-	-	-
	<b>Total</b>	66558582	35.37	0.65	66780982	35.45	0.45	0.08

\* The above table does not include the holdings of promoter group aggregating to 15770224 shares (8.37%) as at 31<sup>st</sup> March 2016.

\* Decrease in shareholding percentage 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.

# Extract of Annual Return (Continued)

## (iii) Change in Promoters' Shareholding

	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
At the beginning of the year	66558582	35.37		
Transactions during the year ended 31 <sup>st</sup> March 2016				
Acquisition by way of gift - 12/18/2015				
			66780982	35.46
At the end of the year			66780982	35.45

Name of the Promoter	No of shares held at the beginning of the year	% of total shares of the Company	No of shares Acquired	% of total shares of the Company
M M Muthiah	234000	0.12	55600	0.03
M M Veerappan	234000	0.12	55600	0.03
M V Subramanian	24320	0.01	55600	0.03
M V Muthiah	19420	0.01	55600	0.03

Note:

- There was no change in Promoter's shareholding other than the details specified above
- Decrease in shareholding percentage 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.

## (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	Nalanda India Fund Limited				
	At the beginning of the year	16793362	8.92		
	Transactions during the year ended 31 <sup>st</sup> March 2016	-	-	-	-
	At the end of the year			16793362	8.91
2	HDFC Trustee Company Ltd - A/C HDFC Mid - Capopportunities Fund				
	At the beginning of the year	9068000	4.82		
	Transactions during the year ended 31 <sup>st</sup> March 2016				
	Transfer-5/15/2015 (Purchase)	5000	0.00	9073000	4.82
	Transfer-1/22/2016(Purchase)	900000	0.48	9973000	5.30
	At the end of the year			9973000	5.29
3	Smallcap World Fund, Inc				
	At the beginning of the year	7985000	4.24		
	Transactions during the year ended 31 <sup>st</sup> March 2016	-	-	-	-
	At the end of the year			7985000	4.24
4	American Funds Insurance Series Global Small Capital				
	At the beginning of the year	5090000	2.70		
	Transaction during the year ended 31 <sup>st</sup> March 2016	-	-	-	-
	At the end of the year			5090000	2.70
5	Nalanda India Equity Fund Limited				
	At the beginning of the year	4478619	2.38		
	Transactions during the year ended 31 <sup>st</sup> March 2016	-	-	-	-
	At the end of the year			4478619	2.38
6	HDFC Trustee Company Limited - HDFC Tax Saverfund				
	At the beginning of the year	3188632	1.69		
	Transactions during the year ended 31 <sup>st</sup> March 2016				
	Transfer-1/22/2016 (Sale)	(1100000)	(0.58)	2088632	1.11
	At the end of the year			2088632	1.11

## Extract of Annual Return (Continued)

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	General Insurance Corporation of India				
	At the beginning of the year	3000000	1.59		
	Transactions during the year ended 31 <sup>st</sup> March 2016	-	-	-	-
	At the end of the year			3000000	1.59
8	The New India Assurance Company Limited				
	At the beginning of the year	2290316	1.22		
	Transactions during the year ended 31 <sup>st</sup> March 2016				
	Transfer-3/4/2016 (sale)	(15111)	(0.01)	2275205	1.21
	Transfer-3/11/2016 (sale)	(50309)	(0.03)	2224896	1.18
	Transfer-3/18/2016 (sale)	(34580)	(0.02)	2190316	1.16
	At the end of the year			2190316	1.16
9	Kotak Mahindra (International) Limited				
	At the beginning of the year	2005766	1.07		
	Transactions during the year ended 31 <sup>st</sup> March 2016	-	-	-	-
	At the end of the year			2005766	1.06
10	ICICI Prudential Life Insurance Company Ltd				
	At the beginning of the year	1808360	0.96		
	Transactions during the year ended 31 <sup>st</sup> March 2016				
	Transfer-4/10/2015 (sale)	(250)	(0.00)	1808110	0.96
	Transfer-4/24/2015 (Purchase)	1555	0.00	1809665	0.96
	Transfer-5/1/2015 (Purchase)	1285	0.00	1810950	0.96
	Transfer-5/15/2015 (Purchase)	800	0.00	1811750	0.96
	Transfer-5/29/2015 (Purchase)	43300	0.02	1855050	0.99
	Transfer-6/12/2015 (Purchase)	4107	0.00	1859157	0.99
	Transfer-6/26/2015 (sale)	(1330)	(0.00)	1857827	0.99
	Transfer-7/3/2015 (sale)	(1995)	(0.00)	1855832	0.99
	Transfer-7/17/2015 (sale)	(1995)	(0.00)	1853837	0.98
	Transfer-8/7/2015 (sale)	(865)	(0.00)	1852972	0.98
	Transfer-8/14/2015 (Purchase)	1700	0.00	1854672	0.99
	Transfer-8/21/2015 (Purchase)	3015	0.00	1857687	0.99
	Transfer-8/28/2015 (Purchase)	26455	0.01	1884142	1.00
	Transfer-10/2/2015 (Purchase)	4550	0.00	1888692	1.00
	Transfer-10/9/2015 (Purchase)	82000	0.04	1970692	1.05
	Transfer-11/6/2015 (Purchase)	1700	0.00	1972392	1.05
	Transfer-11/13/2015 (Purchase)	1700	0.00	1974092	1.05
	Transfer-11/20/2015 (Purchase)	3400	0.00	1977492	1.05
	Transfer-12/4/2015 (Purchase)	2080	0.00	1979572	1.05
	Transfer-12/11/2015 (Purchase)	2080	0.00	1981652	1.05
	Transfer-12/18/2015 (Purchase)	2910	0.00	1984562	1.05
	Transfer-1/15/2016 (Purchase)	9074	0.00	1993636	1.06
	Transfer-1/22/2016 (Purchase)	6815	0.00	2000451	1.06
	Transfer-2/12/2016 (Purchase)	2270	0.00	2002721	1.06
	Transfer-2/19/2016 (Purchase)	3405	0.00	2006126	1.07
	Transfer-2/26/2016 (Purchase)	1364	0.00	2007490	1.07
	Transfer-3/11/2016 (sale)	(1580)	(0.00)	2005910	1.06
	Transfer-3/25/2016 (sale)	(1777)	(0.00)	2004133	1.06
	Transfer-3/31/2016 (sale)	(1185)	(0.00)	2002948	1.06
	At the end of the year			2002948	1.06
11	Sudarshan Securities Private Limited				
	At the beginning of the year	2000000	1.06		
	Transactions during the year ended 31 <sup>st</sup> March 2016				
	Transfer-7/10/2015 (Sale)	(2000000)	(1.06)	-	-
	At the end of the year			-	-

### Notes:

- 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.
- The above list comprises top 10 shareholders as on 1<sup>st</sup> April 2015 and as on 31<sup>st</sup> March 2016.
- 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.

# Extract of Annual Return (Continued)

## (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	<b>M M Murugappan</b>				
	At the beginning of the year	696340	0.37		
	Transaction during the year ended 31 <sup>st</sup> March 2016	-	-	-	-
	At the end of the year			696340	0.37
2	<b>K Srinivasan</b>				
	At the beginning of the year	255704	0.14		
	Transaction during the year ended 31 <sup>st</sup> March 2016				
	Allotment of equity shares on exercise of options under the Company's ESOP scheme-06/18/2015	20000	0.01	275704	0.15
	Allotment of equity shares on exercise of options under the Company's ESOP scheme-09/21/2015	19826	0.01	295530	0.16
	At the end of the year			295530	0.16
3	<b>Sridharan Rangarajan</b>				
	At the beginning of the year	-	-		
	Transactions during the year ended 31 <sup>st</sup> March 2016				
	Allotment of equity shares on exercise of options under the Company's ESOP scheme-05/13/2015	10000	0.01	10000	0.01
	At the end of the year			10000	0.01

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

## V. Indebtedness of the Company including interest outstanding/accrued but not due for payment:

	Secured Loans excluding deposits	Unsecured Loans	Deposits	₹ million Total Indebtedness
<b>Indebtedness at the beginning of the financial year</b>				
i) Principal Amount	215.98	619.39	-	
ii) Interest due but not paid	0.11	-	-	
iii) Interest accrued but not due	-	0.40	-	
<b>Total (i+ii+iii)</b>				835.88
<b>Change in indebtedness during the financial year</b>				
• Addition	3039.38	325.95	-	
• Reduction	2946.79	163.47	-	
<b>Net Change</b>	92.59	162.48	-	255.07
<b>Indebtedness at the end of the financial year</b>				
i) Principal Amount	308.68	782.12	-	
ii) Interest due but not paid	-	-	-	
iii) Interest accrued but not due	-	0.15	-	
<b>Total (i+ii+iii)</b>				1090.95

## VI. Remuneration of Directors and Key Managerial Personnel

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

Sl. No.	Particulars of Remuneration	₹ million
1	Gross salary	17.20
	(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, please specify	-
	<b>Total (A)</b>	<b>17.23</b>
	Ceiling as per the Act	85.80

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

## Extract of Annual Return (Continued)

### B. Remuneration to other Directors:

Sl. No.	Particulars of Remuneration	Name of the Directors						Total
		T L Palani Kumar	M Lakshminarayan	Shobhan M Thakore	Sanjay Jayavarthanavelu	Aroon Raman	Bharati Rao	
1	<b>Independent Directors</b>							
	Fee for attending Board/Committee meetings	0.35	0.40	0.17	0.23	0.17	0.33	1.63
	Commission	0.75	0.75	0.75	0.75	0.75	0.75	4.50
	Others	-	-	-	-	-	-	-
	<b>Total(1)</b>	<b>1.10</b>	<b>1.15</b>	<b>0.92</b>	<b>0.98</b>	<b>0.92</b>	<b>1.08</b>	<b>6.13</b>
2	<b>Other Non-Executive Directors</b>							
	Fee for attending Board/Committee meetings							0.24
	Commission							10.00
	Others							-
	<b>Total(2)</b>							<b>10.24</b>
	<b>Total managerial remuneration (B)=(1+2)</b>							<b>16.37</b>
	<b>Overall ceiling as per the Act (excluding sitting fees)</b>							<b>17.16</b>

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

Sl. No.	Particulars of Remuneration	Key Managerial Personnel			Total
		CEO	Company Secretary	CFO	
1	Gross salary	NA	3.31	8.00	11.31
	(a) Salary as per provisions contained in Section 17(1) of the Income-tax Act, 1961				
	(b) Value of perquisites u/s 17(2) Income-tax Act, 1961		0.02	0.28	0.30
	(c) Profits in lieu of salary under Section 17(3) Incometax Act, 1961				
2	Stock Option		NA	NA	NA
3	Sweat Equity				
4	Commission -as % of profit - others				
5	Others				
	<b>Total</b>		<b>3.33</b>	<b>8.28</b>	<b>11.61</b>

### VII PENALTIES / PUNISHMENT/ COMPOUNDING OF OFFENCES:

Type	Section of the Companies Act	Brief Description	Details of Penalty / Punishment/ Compounding fees imposed	Authority [RD / NCLT/ COURT]	Appeal made, if any (give Details)
<b>A. Company</b>					
Penalty					
Punishment				Nil	
Compounding					
<b>B. Directors</b>					
Penalty					
Punishment				Nil	
Compounding					
<b>C. Other Officers in default</b>					
Penalty					
Punishment				Nil	
Compounding					

# Secretarial Audit Report

for the financial year ended 31<sup>st</sup> March, 2016

[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 31<sup>st</sup> March, 2016 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 31<sup>st</sup> March, 2016 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 there under 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, 1992 and 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 Securities and Exchange Board of India (Share Based Employee Benefits) Regulations, 2014 and the Employee Stock Option Scheme, 2007 approved under the provisions of the Securities and 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 prescribed 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, Central Sales Tax & Local Sales 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 applicable with effect from 1<sup>st</sup> July 2015.

(ii) The Listing Agreements entered into by the Company with BSE Limited and the National Stock Exchange of India Limited and the Uniform Listing Agreement entered with the said stock exchanges pursuant to the provisions of the SEBI (Listing Obligations and Disclosure Requirements) Regulations, 2015 (applicable with effect from 1<sup>st</sup> December 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 change in the composition of the Board of Directors that took place during the period under review was carried out in compliance with the provisions of the Act.

Adequate notice is given to all directors before 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. Meetings which are convened at shorter notice and agenda/notes on agenda which are circulated less than the specified period, the necessary compliances under the Companies Act, 2013 and Secretarial Standards on Board Meeting 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 majority of the Board of Directors/Committee Members and no Director/Member dissented on the decisions taken at such Board/Committee Meeting. Further, in the minutes of the General Meeting, the number of votes cast against the resolutions has been recorded.

**We further report that** based on 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, the scheme of amalgamation of M/s. Cellaris Refractories India Limited (CRIL) with the Company was approved by Hon'ble High Court of Judicature, Madras vide order dated 10<sup>th</sup> September 2015 and the same was filed with the Registrar of Companies, Tamil Nadu, Chennai on 29<sup>th</sup> September 2015.

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

Chennai  
May 4, 2016

**CS R.Sridharan**  
CP No. 3239  
FCS No. 4775

# 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 the 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.

## 1. CUMI'S CORPORATE GOVERNANCE PHILOSOPHY

Carborundum Universal Limited ("CUMI"), a constituent of the Murugappa Group, is committed to 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 and health. The Board recognises that governance expectations are constantly evolving and is committed to keeping its governance standards under 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 in the establishment and administration of 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 standards. 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 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.

## 2. BOARD OF DIRECTORS

The Board being aware of its fiduciary responsibilities, recognises its responsibilities towards all stakeholders and to uphold 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 and in providing effective governance over the Company's affairs and exercise reasonable business judgment 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, 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.

As at 31<sup>st</sup> March 2016, the Board comprises of 8 members with a majority of them being Independent Directors.



## 2.2 Board Meetings

The Board 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.

Besides, information on statutory compliance of applicable laws, minutes of meetings of the sub-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.

During the year ended 31<sup>st</sup> March 2016, there was no Indian subsidiary Company which could be classified as material non-listed Indian subsidiary as per the terms of the Listing Regulations. 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>.

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.

During the year, the Board in line with the requirements of the Listing Regulations has formulated the following policies:

- Policy for determining 'materiality' for disclosure of events/informations to stock exchanges
- Policy for preservation and archival of documents

The dates of the Board meetings are fixed in advance for the full calendar year and during the year ended 31<sup>st</sup> March 2016, eight Board meetings were held on 1<sup>st</sup> May 2015, 23<sup>rd</sup> June 2015, 3<sup>rd</sup> August 2015, 31<sup>st</sup> October 2015, 4<sup>th</sup> February 2016, 5<sup>th</sup> February 2016, 11<sup>th</sup> March 2016 and 25<sup>th</sup> March 2016. 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, a meeting of the Independent Directors was held on 25<sup>th</sup> March 2016. Further, at their meeting held on 4<sup>th</sup> May 2016, the Independent Directors 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.

## 2.3 Details of the Board Members as on 31<sup>st</sup> March 2016

Name	Category	No. of Directorships / (Chairmanships) in Companies including CUMI <sup>(a)</sup>	No. of Committee memberships / (Chairmanships) in Companies including CUMI <sup>(b)</sup>	No. of board meetings attended	Attendance at last AGM	Shares held in CUMI
M M Murugappan DIN - 00170478	Promoter & Non-Executive Director	10 (5)	9 (4)	8*	Yes	696340
T L Palani Kumar DIN - 00177014	Non-Executive & Independent Director	1	1 (1)	8*	Yes	Nil
M Lakshminarayan DIN - 00064750	Non-Executive & Independent Director	7 (1)	3 (1)	8	Yes	Nil
Shobhan M Thakore DIN - 00031788	Non-Executive & Independent Director	9	9 (2)	5	No	Nil
Sanjay Jayavarthanavelu DIN - 00004505	Non-Executive & Independent Director	10 (4)	2	5	Yes	Nil
Aroon Raman DIN - 00201205	Non-Executive & Independent Director	5	2	6	Yes	Nil
Bharati Rao DIN - 01892516	Non-Executive & Independent Director	10	9 (1)	8	Yes	Nil
K Srinivasan DIN - 00088424	Managing Director	4	3	8	Yes	295530

(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

\* Includes participation in the meeting held on 11<sup>th</sup> March 2016 at short notice through audio conference

## 2.4 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.

By way of an introduction to the Company, the newly inducted Director is presented with the 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 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 and its joint venture company at Serkaddu and Ranipet was undertaken by the Board members on 4<sup>th</sup> February 2016. Further, Mr. Aroon Raman, Director visited the Sriperumbudur facility during the year and had interactions with the operating team at the facility. In the backdrop of a dynamic regulatory scenario, regulatory changes impacting the Company is briefed at every meeting 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 fulfill 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>

## 2.5 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 to support the Board in discharging its responsibilities. There are five committees constituted by Board - Audit Committee, Nomination and Remuneration Committee,

Risk Management Committee, Stakeholders Relationship Committee and Corporate Social Responsibility Committee.

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 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, related party transactions, scrutiny of inter-corporate loans & investments, approval of related party transactions, valuation of assets/undertakings of the Company, appointment of registered valuers etc., besides recommending the appointment of statutory auditors and their remuneration to the Board and approval of payments to statutory auditors for non-audit services. 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.

During the year, the Committee had five meetings for reviewing the financial statements and considering the internal audit reports and audit plan. 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	5 (5)
Sanjay Jayavarthanavelu	4 (5)
Bharati Rao	5 (5)

### 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/Whole-time Director(s) (d) determine the annual incentive of the Managing/Whole time Director(s) (e) recommend to the Board, the Commission payable annually to each of the Non-Whole-time 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 report. The Company also has in place a Board approved policy relating to 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, legal, marketing, manufacturing, technology and such other areas that the Board considers desirable.

#### Composition & Meetings

The Committee comprises of three members with all of them being Independent Directors. 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)	3 (3)
T L Palani Kumar	3 (3)
Shobhan M Thakore	1 (3)

### 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 periodically review the Risk Management Policy and the annual risk management framework and ensure that they are comprehensive and 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.

#### Composition & Meetings

The Committee comprises of an Independent Director who is the Chairman of the Committee and the Managing Director. The management committee members comprising the senior management executives are invited to the Committee meetings.

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)
M Lakshminarayan (Chairman)	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 the redressal of investors complaints and approval/overseeing of transfers, transmissions, transpositions, splitting, consolidation of securities, 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 and performing other functions as delegated to it by the Board from time to time.

### Composition & Meetings

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)
K Srinivasan	4 (4)

During the year, there was one investor service complaint pertaining to non-receipt of share certificate submitted for dematerialisation post rejection of the request. It was resolved to the satisfaction of the shareholder. There were no investor service complaints pending as at 31<sup>st</sup> March 2016.

Mrs. 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 Shareholders 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 includes 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.

### Composition & Meetings

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

The Committee met on three occasions during the year. 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)	2 (2)
Aroon Raman	1 (2)
K Srinivasan	2 (2)

## 4. DIRECTORS' REMUNERATION

### 4.1 Policy

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 was granted options under the Employee Stock Option Scheme in year 2007. However, no options were granted to him during the financial year 2015-16.

The compensation to the Non-Executive Directors takes the form of commission on profit. Though shareholders have approved payment of commission upto 1% of net profit of the Company for each year, the actual commission paid to the Directors is restricted to a fixed sum. 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 spent by them has also been adopted. Given the size and nature of its operations and also the rich experience that the 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.

The Non-Executive Directors are also paid sitting fees within the limits set by government regulations for every Board/Committee meeting attended by them.

During the year, in view of the enhanced responsibilities cast on the Directors, the commission and sitting fees payable to the Directors was reviewed and appropriately increased within the limits prescribed under the Companies Act, 2013.

## 4.2 Remuneration for 2015-16

### Non-Executive Directors

Name	Sitting Fees	₹ million	
		Commission @	
M M Murugappan	0.24	10.00	
T L Palani Kumar	0.35	0.75	
M Lakshminarayan	0.40	0.75	
Shobhan M Thakore	0.17	0.75	
Sanjay Jayavarthanavelu	0.23	0.75	
Aroon Raman	0.16	0.75	
Bharati Rao	0.32	0.75	
<b>Total</b>	<b>1.87</b>	<b>14.50</b>	

@ Will be paid after adoption of accounts by shareholders at the 62<sup>nd</sup> Annual General Meeting.

### Managing Director

Name	K Srinivasan <sup>(a)</sup>	₹ million	
Fixed Component	Salary & Allowances	11.12	
	Retirement benefits*	2.52	
	Perquisites	0.03	
Variable Component	Incentive <sup>(a)</sup>	3.56	

\*includes contribution to National Pension System of PFRDA

(a) Represents incentive paid in 2015-16 in respect of the financial year 2014-15.

(b) As per the terms of his remuneration, the Managing Director is eligible for an annual incentive based on a balanced scorecard which comprises of Company financials, Company scorecard and personal objectives. For 2015-16, a sum of ₹4.1 million has been provided in the accounts for this purpose. The actual incentive amount will be decided by the Nomination and Remuneration Committee in August 2016.

(c) With respect to the Employee Stock Options granted to the employees under the Employees Stock Option Scheme, 2007, the options are accounted based on the intrinsic value, as permitted by applicable SEBI Regulations. Since options are granted at the closing market price prior to the date of the grant, the intrinsic value of the options is Nil. During the year, no options were granted under the Company's ESOP Scheme, 2007 (the last grant was made in February, 2012). As required under the 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 shares	Exercise price
Options granted and vested	443800	
Options cancelled	66570	₹91.80 being market price prior to the date of grant
Options lapsed	-	
Options exercised	277230	
Options outstanding	100000	

The first vesting is exercisable over a period of three years from the date of vesting. The second, third, and fourth vesting are exercisable over a period of 6 years from the date of vesting.

## 5. GENERAL BODY MEETINGS

### 5.1 Last three Annual General Meetings

Financial Year	Date	Time	Venue
2012-2013	30.07.2013	2.30 PM	TTK Auditorium, Music Academy, 168 (Old No.306) TTK Road, Royapettah, Chennai - 600 014
2013-2014	01.08.2014	3.00 PM	Tamil Isai Sangam, Rajah Annamalai Mandram, 5, Esplanade Road, Chennai - 600 108
2014-2015	03.08.2015	3.00 PM	TTK Auditorium, Music Academy, 168 (Old No.306) TTK Road, Royapettah, Chennai - 600 014

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

Sl. No.	Item of business	Passed on
1.	Payment of Commission to Non-Executive Directors not exceeding 1% of the Net Profit	30.07.2013
2.	Authorising the Board to borrow a sum of ₹5000 million over above the paid up capital and free reserves either by way of term loans, inter-corporate deposits, external commercial borrowings or by issue of debentures etc. as and when required	01.08.2014

Sl. No.	Item of business	Passed on
3.	Authorising the Board to create a mortgage/charge on the movable and immovable properties of the Company in favour of the lenders/Trustees of the debentures, whenever the Company in the ordinary course of business resorts to borrowings.	01.08.2014
4.	Approval of offer/invitation to subscribe to Non-convertible Debentures of the Company upto ₹2500 million on Private Placement basis.	03.08.2015

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 has been 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. During the year, the Code had been revised in line with the requirements of the SEBI (Prohibition of Insider Trading) Regulations, 2015. The Code requires pre-clearance for dealing in the Company's shares above a threshold and prohibits the purchase or sale of Company securities by the

Directors and the designated employees (together called 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.

## 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 disclosure of the commodity price risks/foreign exchange risk and hedging activities of the Company have been made in Director's report.

Further, the requirements of Regulation 17 to Regulation 27 of the Listing Regulations and clauses (b) to (i) of the sub-regulation 2 of Regulation 46 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 Line or 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. [www.cumi-murugappa.com](http://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 in 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. Other non-mandatory requirements have not been adopted at present.

## 12. CEO/CFO CERTIFICATION

Mr. K Srinivasan, Managing Director and Mr. Sridharan Rangarajan, Chief Financial Officer have given a certificate of 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.

## 13. AUDITOR'S CERTIFICATE ON CORPORATE GOVERNANCE

The Auditor's certificate 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>. A shareholder who has not yet submitted the survey can go to the following 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](mailto: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 Participants in this regard.

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

The Company offers two electronic platforms for credit of dividend i.e. (a) Electronic Clearing Service (ECS) and (b) National Electronic Clearing System (NECS). The advantages of NECS over ECS include faster credit of remittances to beneficiary's account and coverage of more bank branches. NECS operates on the unique bank account number (having not less than 10 digits) allotted by banks post implementation of the Core Banking Solutions.

The NECS compliant account number is required to be intimated to your Depository Participant (in case your shares are in demat mode) or to the Company's RTA, (in case your shares are in physical mode) for us to effect the dividend payment through the NECS mode. Members are encouraged to use the electronic platform for receiving dividends.

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).

Chennai  
May 4, 2016

On behalf of the Board

**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. Board of Directors

M M Murugappan, Chairman  
T L Palani Kumar  
M Lakshminarayan  
Shobhan M Thakore  
Sanjay Jayavarthanavelu  
Aroon Raman  
Bharati Rao  
K Srinivasan, Managing Director

### 4. Management Committee

K Srinivasan, Managing Director  
N Ananthaseshan, President - Abrasives  
Rajesh Khanna, Executive Vice President - Ceramics  
R Rajagopalan, Executive Vice President - Refractories & Prodorite  
M Muthiah, Executive Vice President - Human Resources  
Sridharan Rangarajan, Chief Financial Officer  
P S Jayan, Senior Vice President - Electrominerals

### 5. Auditors

#### Statutory Auditor

Deloitte Haskins & Sells, Chennai  
Chartered Accountants  
No. 52, ASV N Ramana Towers, Venkatanarayana Road,  
T.Nagar, Chennai 600 017

#### 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  
6<sup>th</sup> & 7<sup>th</sup> Floor, A Block, Tidel Park,  
4, Rajiv Gandhi Salai, Taramani,  
Chennai 600 113

#### Secretarial Auditor (for the FY 2015-16)

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

### 6. 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  
Email: rekhas@cumi.murugappa.com

#### Investor Relationship Officer

P Arjun Raj  
Carborundum Universal Limited  
“Parry House”, 43, Moore Street,  
Chennai 600 001  
Tel: +91-44-30006142  
Fax: +91-44-30006149  
Email: investorservices@cumi.murugappa.com

### 7. Registrar and Share Transfer Agent

Members may kindly note that the Registrar and Share Transfer Agent have shifted its office effective 20<sup>th</sup> April 2015 to the below mentioned address:

Karvy Computershare Private Limited  
Unit: Carborundum Universal Limited  
Karvy Selenium Tower B, Plot 31-32, Gachibowli,  
Financial District, Nanakramguda, Hyderabad 500 032.  
Tel: 040-67162222, Fax: 040-23001153  
Toll Free no.: 1800-345-4001  
Email: einward.ris@karvy.com  
Website: www.karvy.com  
Contact Person: Mrs. Varalakshmi P - Asst. General Manager



## 8. Consortium Bankers

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

## 9. Financial Year

1<sup>st</sup> April to 31<sup>st</sup> March

## 10. Cost Audit Report

The Cost Audit report for financial year 2014-15 had been duly filed on 24<sup>th</sup> September 2015 through XBRL mode as mandated by the Ministry of Corporate Affairs within the due date. The due date for filing the Cost Audit Reports for the financial year ended 31<sup>st</sup> March 2016 is 30<sup>th</sup> September 2016.

## 11. 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, Hardwar District, Uttarkhand - 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.47, SIPCOT Industrial Complex, Hosur 635126 Krishnagiri District, Tamil Nadu.
- (n) Super Refractories Division, Plot No.102 & 103, SIPCOT Industrial Complex (Phase II), Ranipet 632403, Tamil Nadu.
- (o) Super Refractories Division - Plant 2, Serkaddu Village, Vinnampalli Post, Katpadi Taluk, Vellore District - 632516, Tamil Nadu.
- (p) 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, Oadhav Road, Ahmedabad - 382415, Gujarat, India.
- (b) Southern Energy Development Corporation Ltd., 29, Nallur PO, Aadichapuram, (Via) Mannargudi Taluk, Tiruvarur District - 614717, Tamil Nadu, India.
- (c) Murugappa Morgan Thermal Ceramics Ltd., Plot No.26 & 27, SIPCOT Industrial Complex, Ranipet - 632403, Tamil Nadu, India.
- (d) Murugappa Morgan Thermal Ceramics Ltd., Plot No.681, Moti Bhojan Village, Sanand-Kalol Highway, Kalol Taluk, Gandhinagar, Dist., Gujarat - 382721, India.
- (e) Wendt (India) Ltd., 69/70, SIPCOT Industrial Complex, Hosur - 635126, Krishnagiri District, Tamil Nadu, India.
- (f) Volzhsky Abrasive Works, 404130 Volzhsky, Volgograd Region, Autodoroge 6, 18, Russia.
- (g) Foskor Zirconia (Pty.) Ltd., PO Box.1, Phalaborwa, South Africa, 1390.
- (h) CUMI Australia Pty Ltd., 29 Gipps St, Carrington, NSW, 2294, Postal Address: PO Box 142, Carrington, NSW, 2294.
- (i) CUMI Australia Pty Ltd. 1/253 Beringarra Ave, Malaga, WA 6944, Postal Address: PO Box 2538, Malaga, WA 6944.
- (j) CUMI Australia Pty Ltd. 20, Waurin St, North Rockhampton, QLD 4701, Postal Address: PO Box 6494, Central QLD Mail Centre, Rockhampton, QLD 4702.
- (k) Wendt Grinding Technologies Ltd. 109/21 Moo 4, Eastern Seaboard Industrial Estate (Rayong), Tambol Pluakdaeng, Amphur Pluakdaeng, Rayong 21140, Thailand.
- (l) Thukela Refractories Isithebe Pty Ltd., No. 1 Yellow Street, Isithebe, South Africa.

## 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.nsdli.co.in](http://www.nsdli.co.in)

Central Depository Services (India) Ltd. (CDSL) [www.cdslindia.com](http://www.cdslindia.com)

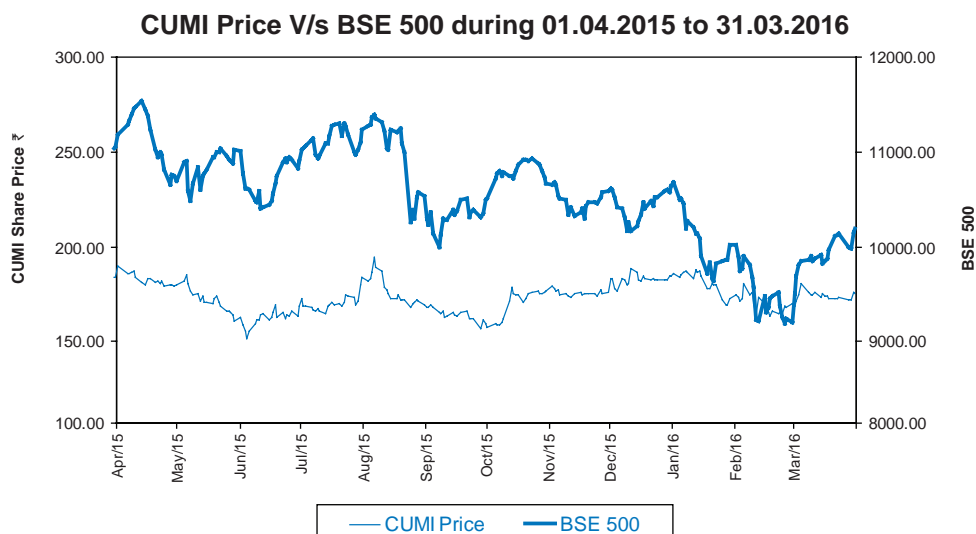
### 3. Share price information

#### a) Monthly market price data

Month	BSE Ltd.			National Stock Exchange of India Ltd.		
	High ₹	Low ₹	Traded Volume (No. of shares)	High ₹	Low ₹	Traded Volume (No. of shares)
April 2015	196.90	178.75	291274	197.00	178.00	736061
May 2015	189.85	160.10	133014	189.55	160.00	386835
June 2015	174.50	149.00	426762	174.40	150.10	944145
July 2015	186.20	162.75	188963	186.50	161.10	396974
August 2015	195.95	158.00	229568	195.50	158.95	851104
September 2015	170.00	156.00	105771	171.00	156.00	218741
October 2015	181.00	154.00	143688	180.95	155.15	664040
November 2015	185.30	169.55	60310	184.95	168.20	426052
December 2015	190.95	176.00	130635	190.90	176.50	560540
January 2016	195.00	167.00	995896	192.20	169.00	961412
February 2016	182.95	158.50	55323	183.50	156.10	206584
March 2016	189.00	162.20	45445	183.50	167.20	502424

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

Stock market snapshot CUMI Price V/s BSE 500 during 01.04.2015 to 31.03.2016



## C. OTHER INFORMATION

### 1. Share Capital Details

#### (a) Outstanding shares

The total number of outstanding shares as on 31<sup>st</sup> March 2016 is 188379560. All the shares have been fully paid up. As on 31<sup>st</sup> March 2016, 184599131 equity shares constituting 97.99% of the total paid up capital of the Company have been dematerialised.

#### (b) Shareholding Pattern/Distribution as on 31<sup>st</sup> March 2016

##### (i) Shareholding Pattern

Category	% to total paid up Capital
Promoter/Promoter Group	43.82
Foreign Institutional Investors	19.77
Financial Institutions including insurance companies	3.40
Non-resident (NRI's / OCBs / FIIs)	1.13
Mutual Funds	12.15
Banks	0.01
Others	19.72
<b>Total</b>	<b>100.00</b>

##### (ii) Distribution of Shareholding

Sl. No.	Category	No. of Holders	% to Holders	No. of Shares	% to Equity
1	1 - 100	8098	42.36	312423	0.17
2	101 - 200	2004	10.48	358233	0.19
3	201 - 500	2620	13.70	998004	0.53
4	501 - 1000	2066	10.81	1686865	0.90
5	1001 - 5000	3273	17.12	8445260	4.48
6	5001 - 10000	559	2.92	4107623	2.18
7	10001 and above	498	2.61	172471152	91.55
<b>Total</b>		<b>19118</b>	<b>100.00</b>	<b>188379560</b>	<b>100.00</b>

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

Under the CUMI Employees Stock Option Scheme, 2007, the following stock options are outstanding as on 31<sup>st</sup> March 2016:

Sl. No.	Grant Date	Exercise Price (₹)	Net Outstanding Options <sup>(a)</sup>	Likely impact on full exercise	
				Share Capital ₹ million	Share Premium ₹ million
1	29-Sep-07	91.80	397008	0.40	36.05
2	24-Jul-08	61.40	5244	0.01	0.32
3	27-Jan-11	125.08	375650	0.38	46.61
4	27-Jan-11	125.08	177888	0.18	22.07
5	05-Aug-11	146.00	190080	0.19	27.56
6	04-Feb-12	155.00	77787	0.08	11.98
<b>Total</b>			<b>1223657</b>	<b>1.22</b>	<b>144.59</b>

#### Note

(a) In respect of the Options referred in serial number 4 above, 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, 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.

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

### 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 and to the Company Secretary. The transfers, if any, are approved at least twice a month.

#### 4. Unclaimed Shares

Particulars	No. of Shareholders	No. of Shareholders
Aggregate number of shareholders and the outstanding shares lying in the Unclaimed Suspense Account at the beginning of the year	550	825200
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	13	26990
Number of shareholders to whom shares were transferred from the Unclaimed Suspense Account during the year	14	29890
Aggregate number of shareholders and the outstanding shares lying in the Unclaimed Suspense Account at the end of the year	536	795310

\* One claim for 2900 shares which was received during the year 2014-15 was transferred in 2015-16.

Shareholders are entitled to claim these shares 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

Wednesday, the 3<sup>rd</sup> August 2016 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

An interim dividend of ₹1.50 per equity share was paid during the year.

##### (iii) Unclaimed Dividend

Dividends remaining unclaimed/unpaid for a period of 7 years shall be transferred to the Investor Education Protection Fund. The Company has transferred unclaimed/unencashed dividends upto FY 2007-08 to the Investor Education Protection Fund during the year ended 31<sup>st</sup> March 2016. The Company has uploaded the details relating to unclaimed dividends on its website for the benefit of its Shareholders.

On behalf of the Board

Chennai

May 4, 2016

**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 31<sup>st</sup> March 2016, as envisaged in regulation 34(3) read with Schedule V of the Listing Regulations.

Chennai

May 4, 2016

**K Srinivasan**

*Managing Director*

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

# Independent Auditor's Certificate

To

The Members of CARBORUNDUM UNIVERSAL LIMITED

1. We have examined the compliance of conditions of Corporate Governance by Carborundum Universal Limited ("the Company"), for the year ended on 31<sup>st</sup> March, 2016, as stipulated in:
  - Clause 49 (excluding clause 49(VII)(E)) of the Listing Agreements of the Company with stock exchange(s) for the period from April 1, 2015 to November 30, 2015.
  - Clause 49(VII)(E) of the Listing Agreements of the Company with the stock exchange(s) for the period from April 1, 2015 to September 1, 2015.
  - Regulation 23(4) of the SEBI (Listing Obligations and Disclosure Requirements) Regulations, 2015 (the Listing Regulations) for the period from September 2, 2015 to March 31, 2016 and
  - Regulations 17 to 27 (excluding Regulation 23(4)) and clauses (b) to (i) of Regulation 46(2) and para C, D and E of Schedule V of the Listing Regulations for the period from December 1, 2015 to March 31, 2016.
2. The compliance of 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 compliance with the conditions of the Corporate Governance. It is neither an audit nor an expression of opinion on the financial statements of the Company.
3. We have examined the relevant records of the Company in accordance with the Generally Accepted Auditing Standards in India, to the extent relevant, and as per the Guidance Note on Certification of Corporate Governance issued by the Institute of the Chartered Accountants of India.
4. In our opinion and to the best of our information and according to our examination of the relevant records and the explanations given to us and the representations made by the Directors and the Management, we certify that the Company has complied with the conditions of Corporate Governance as stipulated in Clause 49 of the Listing Agreement and Regulation 17 to 27 and clauses (b) to (i) of Regulation 46(2) and para C, D and E of Schedule V of the Listing Regulations for the respective periods of applicability as specified under paragraph 1 above, during the year ended March 31, 2016.
5. We state that such compliance is neither an assurance as to the future viability of the Company nor the efficiency or effectiveness with which the Management has conducted the affairs of the Company.

For **Deloitte Haskins & Sells**

*Chartered Accountants*

(Firm's Registration No.: 008072S)

**Geetha Suryanarayanan**

*Partner*

(Membership No.: 29519)

Chennai  
May 4, 2016

# Independent Auditor's Report

To  
The Members of Carborundum Universal  
Limited

## Report on the Consolidated Financial Statements

We have audited the accompanying consolidated financial statements of **CARBORUNDUM UNIVERSAL LIMITED** (hereinafter referred to as "the Holding Company"), its subsidiaries (the Holding Company and its subsidiaries together referred to as "the Group") and its jointly controlled entities comprising of the Consolidated Balance Sheet as at 31<sup>st</sup> March, 2016, the Consolidated Statement of Profit and Loss, the Consolidated Cash Flow Statement for the year then ended, and a summary of the significant accounting policies and other explanatory information (hereinafter referred to as "the consolidated financial statements").

## Management's Responsibility for the Consolidated Financial Statements

The Holding Company's Board of Directors is responsible for the preparation of these consolidated financial statements in terms of the requirements of the Companies Act, 2013 (here in after referred to as "the Act") that give a true and fair view of the consolidated financial position, consolidated financial performance and consolidated cash flows of the Group including its Jointly controlled entities in accordance with the accounting principles generally accepted in India, including the Accounting Standards specified under Section 133 of the Act, as applicable. The respective Board of Directors of the companies included in the Group and of its jointly controlled entities are responsible for maintenance of adequate accounting records in accordance with the provisions of the Act for safeguarding the assets and for preventing and detecting frauds and other irregularities; the selection and application of appropriate accounting policies; making judgments 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 have been used for the purpose of preparation of the consolidated financial statements by the Directors of the Holding Company, as aforesaid.

## Auditor's Responsibility

Our responsibility is to express an opinion on these consolidated financial statements based on our audit. While conducting the audit, we have taken into account the provisions of the Act, 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.

We conducted our audit in accordance with the Standards on Auditing specified under Section 143(10) of the Act. Those Standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and the disclosures in the consolidated financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal financial control relevant to the Holding Company's preparation of the consolidated financial statements that give a true and fair view in order to design audit procedures that are appropriate in the circumstances but not for the purpose of expressing an opinion on whether the Holding Company has an adequate internal financial controls system over financial reporting in place and the operating effectiveness of such controls. An audit also includes evaluating the appropriateness of the accounting policies used and the reasonableness of the accounting estimates made by the Holding Company's Board of Directors, as well as evaluating the overall presentation of the consolidated financial statements.

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 (a) of the Other Matters paragraph below, is sufficient and appropriate to provide a basis for our audit opinion on the consolidated financial statements.

## Opinion

In our opinion and to the best of our information and according to the explanations given to us, the aforesaid consolidated 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 and its jointly controlled entities as at 31<sup>st</sup> March, 2016, their consolidated profits and their consolidated cash flows for the year ended on that date.

## Other Matters

(a) We did not audit the financial statements of 13 subsidiaries and 2 jointly controlled entities,

# Independent Auditor's Report (Continued)

whose financial statements reflect total assets of ₹8,482 million as at 31<sup>st</sup> March, 2016, total revenues of ₹8,417 million and net cash flows amounting to ₹100 million for the year ended on that date, as considered in the consolidated financial statements. These financial statements have been audited by other auditors whose reports have been furnished to us by the Management and our opinion on the consolidated financial statements, in so far as it relates to the amounts and disclosures included in respect of these subsidiaries and jointly controlled entities, is based solely on the reports of the other auditors.

Our opinion on the consolidated 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.

## Report on Other Legal and Regulatory Requirements

1. 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 financial statements.
  - (b) In our opinion, proper books of account as required by law relating to preparation of the aforesaid consolidated financial statements have been kept so far as it appears from our examination of those books and the reports of the other auditors.
  - (c) The Consolidated Balance Sheet, the Consolidated Statement of Profit and Loss, and the Consolidated Cash Flow Statement dealt with by this Report are in agreement with the relevant books of account maintained for the purpose of preparation of the consolidated financial statements.
  - (d) In our opinion, the aforesaid consolidated financial statements comply with the Accounting Standards specified under Section 133 of the Act, as applicable.
  - (e) On the basis of the written representations received from the directors of the Holding Company as on 31<sup>st</sup> March, 2016 taken on record by the Board of Directors of the Holding Company and the reports of the statutory auditors of its subsidiary companies and jointly controlled

entities incorporated in India, none of the directors of the holding company, subsidiary companies and jointly controlled entities incorporated in India is disqualified as on 31<sup>st</sup> March, 2016 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 over financial reporting and the operating effectiveness of such controls, refer to our Report in "Annexure A", which is based on the auditors' reports of the holding company, subsidiary companies and jointly controlled entities incorporated in India. Our report expresses an unmodified opinion on the adequacy and operating effectiveness of the holding company, subsidiary companies and jointly controlled entities, incorporated in India, on the internal financial controls over financial reporting.
- (g) With respect to the other matters to be included in the Auditor's Report in accordance with Rule 11 of the Companies (Audit and Auditor's) Rules, 2014, in our opinion and to the best of our information and according to the explanations given to us:
  - (i) The consolidated financial statements disclose the impact of pending litigations on the consolidated financial position of the Group and its jointly controlled entities- Refer Note 27 to the consolidated financial statements.
  - (ii) The Group and its jointly controlled entities did not have any material foreseeable losses on long-term contracts including derivative contracts.
  - (iii) There has been no delay in transferring amounts which were required to be transferred to the Investor Education and Protection Fund by the holding company, its subsidiary companies and jointly controlled entities incorporated in India.

For **Deloitte Haskins & Sells**

*Chartered Accountants*

(Firm's Registration No.: 008072S)

**Geetha Suryanarayanan**

*Partner*

(Membership No.: 29519)

Chennai, May 4, 2016

# Annexure "A" to the Independent Auditor's Report

(Referred to in paragraph (f) under 'Report on Other Legal and Regulatory Requirements' of our report of even date)

Report on the Internal Financial Controls Over Financial Reporting under Clause (i) of Sub-section 3 of Section 143 of the Companies Act, 2013 ("the Act")

In conjunction with our audit of the consolidated financial statements of the Company for the year ended March 31, 2016, we have audited the internal financial controls over financial reporting of Carborundum Universal Limited (hereinafter referred to as "the Holding Company"), its subsidiaries (the Holding Company and its subsidiaries together referred to as "the Group") and jointly controlled entities, which are companies incorporated in India, as of that date.

## Management's Responsibility for Internal Financial Controls

The respective Board of Directors of the Holding company, its subsidiary companies, and jointly controlled companies, which are incorporated in India, are 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". 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 Companies Act, 2013.

## Auditor's Responsibility

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 issued by the Institute of Chartered Accountants of India and the Standards on Auditing, prescribed under Section 143(10) of the Companies Act, 2013, to the extent applicable to an audit of internal financial controls. 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.

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 whether a risk of material weakness exists, 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.

We believe that the audit evidence we have obtained and the audit evidence obtained by the other auditors of the subsidiary companies, and joint controlled entities, which are companies incorporated in India, 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

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

Because of the inherent limitations of internal financial controls over financial reporting, including the possibility



# Annexure "A" to the Independent Auditor's Report (Continued)

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

In our opinion to the best of our information and according to the explanations given to us, the Holding Company, its subsidiary companies and jointly controlled entities, 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, 2016, 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

Our aforesaid report 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 3 subsidiary companies, and 3 jointly controlled companies, which are companies incorporated in India, is based on the corresponding reports of the auditors of such companies incorporated in India.

For **Deloitte Haskins & Sells**  
*Chartered Accountants*  
(Firm's Registration No.: 008072S)

**Geetha Suryanarayanan**  
*Partner*

Chennai, May 4, 2016

(Membership No.: 29519)

# Consolidated Balance Sheet

As at March 31, 2016

Particulars	Note	₹ million	
		As at 31.03.2016	As at 31.03.2015
<b>EQUITY AND LIABILITIES</b>			
<b>Shareholder's Funds</b>			
Share Capital	3	188.38	188.18
Reserves and Surplus	4	11670.50	10698.92
		<b>11858.88</b>	<b>10887.10</b>
<b>Minority Interest</b>		713.39	578.03
<b>Non-current liabilities</b>			
Long-term Borrowings	5	295.33	566.75
Deferred tax liabilities (net)	6	429.42	493.43
Long term provision	7	72.58	50.31
		<b>797.33</b>	<b>1110.49</b>
<b>Current liabilities</b>			
Short-term Borrowings	8	2270.33	2201.05
Trade payables			
a. Total outstanding dues of micro and small enterprises	9a	21.02	26.68
b. Total outstanding dues of enterprises other than micro and small enterprises	9b	1506.91	1681.61
Other current liabilities	10	1516.06	1532.88
Short-term provisions	11	151.99	232.49
		<b>5466.31</b>	<b>5674.71</b>
<b>Total</b>		<b>18835.91</b>	<b>18250.33</b>
<b>ASSETS</b>			
<b>Non-current assets</b>			
<b>Fixed assets</b>			
Tangible assets	12	5913.72	6657.73
Intangible assets	12	118.00	113.44
Capital work-in-progress		898.19	433.17
Goodwill on Consolidation	36	1214.51	1156.02
Non current investments	13	85.50	78.01
Deferred tax assets (net)	6	61.18	93.77
Long-term loans and advances	14	387.95	253.56
		<b>8679.05</b>	<b>8785.70</b>
<b>Current assets</b>			
Current investments	15	285.42	333.25
Inventories	16	3866.38	3883.31
Trade receivables	17	3947.56	3702.88
Cash and Bank balances	18	1173.22	991.65
Short-term loans and advances	19	603.98	553.54
Fixed Assets held for sale	28	280.30	-
		<b>10156.86</b>	<b>9464.63</b>
<b>Total</b>		<b>18835.91</b>	<b>18250.33</b>

See accompanying notes forming part of the consolidated financial statements

In terms of our report attached

On behalf of the Board

For **Deloitte Haskins & Sells**  
Chartered Accountants

**M M Murugappan**  
Chairman

**K Srinivasan**  
Managing Director

**Geetha Suryanarayanan**  
Partner

**Sridharan Rangarajan**  
Chief Financial Officer

**Rekha Surendhiran**  
Company Secretary

Chennai  
May 4, 2016

# Consolidated Statement of Profit And Loss

## For the year ended March 31, 2016

₹ million

Particulars	Note	2015-16	2014-15
Revenue from operation (gross)	20	22004.02	21625.93
Less : Excise Duty		1160.61	1124.22
<b>Revenue from operations (net)</b>		<b>20843.41</b>	<b>20501.71</b>
<b>Expenses :</b>			
Cost of materials consumed		6041.41	6119.38
Purchases of stock-in-trade		1186.86	945.04
Changes in inventories of finished goods, work-in-process and stock in trade	21	(0.84)	111.85
Employee benefit expense	22	2715.21	2754.36
Other expenses	23	7621.72	7936.74
<b>Total</b>		<b>17564.36</b>	<b>17867.37</b>
<b>Earnings before exceptional items, interest, tax, depreciation and amortisation (EBITDA)</b>		<b>3279.05</b>	<b>2634.34</b>
Finance costs	24	227.26	253.42
Depreciation and amortisation expense	12	944.35	1003.72
Other income	25	331.36	261.85
<b>Profit before exceptional items and tax</b>		<b>2438.80</b>	<b>1639.05</b>
Exceptional Items	37	-	565.00
<b>Profit before tax</b>		<b>2438.80</b>	<b>2204.05</b>
<b>Tax expense :</b>			
Current tax		931.85	890.97
Deferred tax	6	(36.55)	(69.42)
<b>Profit for the year</b>		<b>1543.50</b>	<b>1382.50</b>
Less : Minority interest		115.59	56.49
<b>Profit for the year after taxes and minority interest</b>		<b>1427.91</b>	<b>1326.01</b>
<b>Earnings per equity share :</b>	34		
Basic		7.58	7.06
Diluted		7.57	7.04

See accompanying notes forming part of the consolidated financial statements

In terms of our report attached

For **Deloitte Haskins & Sells**  
Chartered Accountants

**Geetha Suryanarayanan**  
Partner

Chennai  
May 4, 2016

On behalf of the Board

**M M Murugappan**  
Chairman

**K Srinivasan**  
Managing Director

**Sridharan Rangarajan**  
Chief Financial Officer

**Rekha Surendhiran**  
Company Secretary

# Consolidated Cash Flow Statement

## For the year ended March 31, 2016

₹ million

Particulars	2015-16	2014-15
<b>A. Cash flow from operating activities</b>		
Net Profit before Tax	2438.80	2204.05
Depreciation	944.35	1003.72
Interest and finance charges	227.26	253.42
(Profit)/Loss on sale of fixed assets (net)	39.44	(22.01)
(Profit)/Loss on sale of Immovable property	-	(869.20)
Provision for doubtful debts and advances	85.22	86.30
(Profit)/Loss on sale of investments (net)	(8.99)	(5.00)
Provision for impairment of fixed assets	-	329.75
Gain on restructuring of business (net)	-	(25.55)
Interest and dividend income	(58.93)	(54.90)
Excess provision made in the previous years released	(56.89)	(59.71)
Bad debts	1.62	0.99
(Profit)/Loss on exchange fluctuation	(152.84)	(90.96)
<b>Operating profit before working capital changes</b>	<b>3459.04</b>	<b>2750.90</b>
Adjustments for :		
- Inventories	16.93	456.71
- Long term loans & advances	(9.79)	0.19
- Trade receivable	(150.65)	517.80
- Short term loans & advances & Fixed asset held for Sale	(195.38)	(64.40)
- Trade payables	(152.28)	(289.25)
- Other current liabilities & Provision	200.39	599.40
Cash generated from operations	3168.26	3971.35
Direct taxes paid	(929.33)	(713.76)
<b>Net Cash Flow from operating activities [A]</b>	<b>2238.93</b>	<b>3257.59</b>
<b>B. Cash Flow from investing activities</b>		
Purchase of tangible fixed assets	(1679.15)	(776.54)
Purchase of intangible assets	(118.23)	(69.79)
Proceeds from sale of Fixed assets	728.12	910.73
Proceeds from sale of Investments	1.50	8.06
Dividends received	13.03	19.79
Interest received	45.89	35.11
Direct taxes paid on capital gain	-	(196.90)
<b>Net cash (used in) investing activities [B]</b>	<b>(1008.84)</b>	<b>(69.54)</b>
<b>C. Cash Flow from financing activities</b>		
Proceeds from issue of equity shares including premium	24.63	47.39
Repayments of Long term borrowings	(362.59)	(1310.67)
Proceeds from other borrowings	69.28	149.63
Interest paid	(228.14)	(252.60)
Paid to Investor Education and Protection Fund	(0.80)	(0.67)
Dividends paid including tax on dividend	(393.61)	(248.13)
<b>Net cash (used in) financing activities [C]</b>	<b>(891.23)</b>	<b>(1615.05)</b>
<b>D. Translation adjustment [D]</b>	<b>(207.95)</b>	<b>(1291.21)</b>
<b>Net increase/(decrease) in cash and cash equivalents [A + B + C + D]</b>	<b>130.91</b>	<b>281.79</b>
Cash and cash equivalents opening balance	1312.54	1030.75
Cash and cash equivalents closing balance	1443.45	1312.54
<b>Net increase/(decrease) in cash and cash equivalents</b>	<b>130.91</b>	<b>281.79</b>
<b>Reconciliation of cash and cash equivalents with the Balance sheet</b>		
Cash and Bank balances as per Balance sheet	1173.22	991.65
Less : Bank balances not considered as Cash and Cash equivalents - earmarked account	(15.19)	(12.36)
Add : Current Investments considered as Cash and Cash equivalents - Investments in units of Mutual funds	285.42	333.25
	<b>1443.45</b>	<b>1312.54</b>

See accompanying notes forming part of the financial statements

In terms of our report attached

On behalf of the Board

For **Deloitte Haskins & Sells**

Chartered Accountants

**Geetha Suryanarayanan**

Partner

Chennai

May 4, 2016

**M M Murugappan**

Chairman

**Sridharan Rangarajan**

Chief Financial Officer

**K Srinivasan**

Managing Director

**Rekha Surendhiran**

Company Secretary

# Notes Forming Part of the Consolidated Financial Statements for the year ended March 31, 2016

## 1. a) Corporate information

Carborundum Universal Limited [CUMI] was incorporated as a Public Limited Company in 1954 and is listed in National and Bombay Stock Exchanges in India. CUMI manufactures and sells mainly Abrasives, Ceramics (Industrial Ceramics & Refractories) and Electrominerals.

## 1. b) Information on Consolidated financials as per Accounting Standards 21 and 27

### A. SUBSIDIARIES :

(i) List of Subsidiaries included in the Consolidated financial Statements

Name of the Subsidiary	Country of Incorporation	31.03.2016 Share in ownership and voting power	31.03.2015 Share in ownership and voting power
<b>Direct Holdings :</b>			
Net Access India Ltd	India	100%	100%
Southern Energy Development Corporation Ltd	India	84.76%	84.76%
Sterling Abrasives Ltd	India	60%	60%
CUMI (Australia) Pty Ltd	Australia	51.22%	51.22%
Cellaris Refractories India Limited (Refer (iii) below)	India	-	100%
CUMI International Ltd	Cyprus	100%	100%
<b>Holdings through Subsidiary :</b>			
Volzhsky Abrasive Works	Volgograd, Russia	97.44%	97.44%
Foskor Zirconia (Pty) Ltd	South Africa	51%	51%
CUMI America Inc	USA	100%	100%
CUMI Canada Inc (Refer (iv) below)	Canada	-	100%
CUMI Middle east FZE	Ras Al Khaimah, UAE	100%	100%
CUMI Abrasives & Ceramics Company Ltd	China	100%	100%
Thukela Refractories Isithebe Pty Limited	South Africa	100%	100%
CUMI Europe s.r.o	Czech Republic	100%	100%

(ii) Consolidated financial statements are prepared based on the audited financials of the subsidiaries as on 31.03.2016.

(iii) During the year, Cellaris Refractories India Limited the erstwhile wholly owned subsidiary of the Company was merged with the Company with effect from April 1, 2015.

(iv) During the current year the Company's step down subsidiary in Canada was legally wound up on 22<sup>nd</sup> May 2015, consequent to shifting of Canadian operations to another step down subsidiary in America.

### B. JOINT VENTURES :

i) List of Joint ventures included in the Consolidated financial Statements

Name of the Joint Venture	Country of Incorporation	31.03.2016 Share in ownership and voting power	31.03.2015 Share in ownership and voting power
Murugappa Morgan Thermal Ceramics Ltd	India	49.00%	49.00%
Wendt (India) Ltd	India	39.87%	39.87%
Ciria India Ltd	India	30.00%	30.00%

ii) Proportionate consolidation is done based on audited financials of the Joint ventures for the year ended 31.03.2016 and as approved by the Board of Directors of those companies.

In respect of Wendt (India) Ltd, the consolidated financials of the company with its subsidiaries Wendt Grinding Technologies Ltd, Thailand and Wendt Middle East FZE, Sharjah are considered for consolidation.

# Notes Forming Part of the Consolidated Financial Statements

## for the year ended March 31, 2016 (Continued)

1. c) 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	2015-16			2014-15		
	Net assets ie., total asset minus total liabilities As % of consolidated net assets	Amount (₹ million)	Share in profit or loss As % of consolidated Profit	Net assets ie., total asset minus total liabilities As % of consolidated net assets	Amount (₹ million)	Share in profit or loss As % of consolidated Profit
I. Parent						
Carborundum Universal Limited	79.86%	9470.09	81.43%	1162.78	8598.90	111.86%
1483.30						
II. Subsidiaries (including Step down subsidiaries)						
a) Indian						
1. Net Access India Ltd	0.68%	80.90	1.17%	16.67	70.25	1.20%
15.90						
2. Southern Energy Development Corporation Ltd	1.77%	209.44	1.63%	23.26	186.17	0.55%
7.26						
3. Sterling Abrasives Ltd	3.22%	381.34	3.62%	51.64	377.42	4.04%
53.51						
4. Cellaris Refractories India Limited	-	-	-	-	105.27	(2.01%)
(26.59)						
b) Foreign						
1. CUMI (Australia) Pty Ltd	4.95%	587.43	6.10%	87.08	558.42	7.34%
97.28						
2. CUMI International Limited	22.29%	2643.77	(15.53%)	(221.84)	2706.81	(40.73%)
(540.07)						
3. Volzhsky Abrasives Works	22.88%	2713.49	49.07%	700.68	2435.89	44.43%
589.20						
4. Foskor Zirconia (Pty) Ltd	3.78%	448.63	4.42%	63.16	144.97	(3.41%)
(45.16)						
5. CUMI America Inc	(0.18%)	(21.78)	(3.73%)	(53.20)	30.31	(2.81%)
(37.30)						
6. CUMI Canada Inc	-	-	(0.15%)	(2.21)	21.83	(1.19%)
(15.82)						
7. CUMI Middle East FZE	0.12%	14.16	(0.72%)	(10.29)	23.20	0.68%
9.01						
8. CUMI Abrasives & Ceramics Company Limited	(1.22%)	(145.35)	(14.45%)	(206.30)	59.37	(9.47%)
(125.64)						
9. Thukela Refractories Isithebe Pty Limited	(0.06%)	(7.24)	(4.78%)	(68.30)	66.00	(22.74%)
(301.51)						
10. CUMI Europe s.r.o	0.07%	8.56	(0.70%)	(9.99)	16.85	(0.28%)
(3.70)						
Minority interest in all subsidiaries	(6.02%)	(713.39)	(8.10%)	(115.59)	(578.03)	(4.26%)
(56.49)						
III. Joint ventures (as per proportionate consolidation)						
Indian						
1. Murugappa Morgan Thermal Ceramics Ltd	5.06%	599.58	6.55%	93.52	540.49	8.26%
109.59						
2. Wendt (India) Ltd	3.59%	425.68	2.82%	40.29	411.38	4.07%
53.98						
3. Ciria India Ltd.	0.54%	64.63	1.08%	15.46	67.22	2.48%
32.83						
Inter-company Elimination & Consolidation Adjustments	(41.33%)	(4901.06)	(9.73%)	(138.91)	(4955.62)	1.99%
26.43						
Total	100.00%	11858.88	100.00%	1427.91	10887.10	100.00%
1326.01						

Investment in foreign subsidiaries from b (3) to b (10) is held through a subsidiary

# Notes Forming Part of the Consolidated Financial Statements for the year ended March 31, 2016 (Continued)

## 2. Significant accounting policies :

### i. Basis of preparation

The consolidated financial statements of the Company and its subsidiaries and jointly controlled entities (together the 'Group') have been prepared in accordance with the Generally Accepted Accounting Principles in India (Indian GAAP) to comply with the Accounting Standards specified under Section 133 of the Companies Act, 2013, read with Rule 7 of the Companies (Accounts) Rules, 2014 and the relevant provisions of the Companies Act, 2013 ("the 2013 Act"). The consolidated financial statements have been prepared on accrual basis under the historical cost convention except for categories of fixed assets acquired before 31<sup>st</sup> August 1984, that are carried at revalued amounts. The accounting policies adopted in the preparation of the consolidated financial statements are consistent with those followed in the previous year.

### ii. Principles of Consolidation

- (a) The financial statements of the Company and its subsidiaries have been consolidated in accordance with the principles and procedures for the preparation and presentation of consolidated financial statements as laid down under Accounting Standard - 21 Consolidated Financial Statements, on a line-by-line basis by adding together the like items of assets, liabilities, income and expenses, after eliminating intra-group balances, intra group transactions and resulting unrealized profits/losses, unless cost cannot be recovered.
- (b) The Company's interest in Joint ventures are consolidated as per Accounting Standard 27 Financial Reporting of Interests in Joint Ventures, on a line-by-line basis by adding together the book values of assets, liabilities, income and expenses on a proportionate basis to the extent of the group's interest in such entity, after eliminating the group's share of unrealized profits/losses on intra group transactions. Interests of Jointly controlled entities are included in the segments to which they relate.
- (c) Consolidated financial statements are prepared using uniform accounting policies except as stated in (vi)(f), (ix)(b) & (c), (xi)(a) and (xiii)(b) & (d) of this Schedule, the adjustments arising out of the same are not considered material.
- (d) The excess of cost to the Company/Group of its investments in the subsidiary companies/jointly controlled entities over its share of equity of the subsidiary companies/jointly controlled entities, at the dates on which the investments in the subsidiary companies/jointly controlled entities were made,

is recognised as 'Goodwill' being an asset in the consolidated financial statements and is tested for impairment on annual basis. Alternatively, where the share of equity in the subsidiary companies/jointly controlled entities as on the date of investment is in excess of cost of investments of the Group, it is recognised as 'Capital Reserve' and shown under the head 'Reserves & Surplus', in the consolidated financial statements.

- (e) Minority Interest in the net assets of the consolidated subsidiaries consist of the amount of equity attributable to the minority shareholders at the date on which investments in the subsidiary companies were made and further movements in their share in the equity, subsequent to the dates of investments. Net profit/loss for the year of the subsidiaries attributable to minority interest is identified and adjusted against the profit after tax of the Group in order to arrive at the income attributable to shareholders of the Company.
- (f) Goodwill arising on consolidation is not amortised but tested for impairment.

### iii. Use of Estimates

The preparation of financial statements requires estimates and assumptions to be made that affect the reported amount of assets and liabilities on the date of the financial statements and the reported amount of revenues and expenses during the reporting period. Management believes that the estimates used in the preparation of financial statements are prudent and reasonable. Differences, if any, between the actual results and estimates are recognised in the period in which the result are known/materialised.

### iv. 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.

### v. Cash flow statement

Cash flows are reported using the indirect method, whereby profit/(loss) before extraordinary items and 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.

# Notes Forming Part of the Consolidated Financial Statements for the year ended March 31, 2016 (Continued)

## vi. Fixed assets (Tangible/Intangible) and depreciation/amortisation

- (a) Fixed assets are stated at historical cost (less accumulated depreciation except land and buildings added up to 31<sup>st</sup> August 1984 which are shown as per the revaluation done in that year; and land and buildings of Sterling Abrasives Limited which are shown as per the revaluation done on 31<sup>st</sup> December 1993).
- (b) Cost comprises of direct cost, related taxes, duties, freight and attributable finance costs (Refer (viii) below) till such assets are ready for its intended use and net of CENVAT/VAT wherever applicable. Subsidy received from State Government towards specific assets is reduced from the cost of fixed assets. Fixed Assets taken on finance lease are capitalised.
- (c) Capital work in progress is stated at the amount expended up to the Balance sheet date.
- (d) Machinery spares used in connection with a particular item of fixed asset and the use of which is irregular, are capitalized at cost net of CENVAT/VAT, as applicable.
- (e) Expenditure directly relating to new projects prior to commencement of commercial production is capitalised. Indirect expenditure (net of income) attributable to the new projects or which are incidental thereto are also capitalised.
- (f) Depreciable amount for assets is the cost of an asset, or other amount substituted for cost, less its estimated residual value.

Depreciation on tangible fixed assets has been provided on the straight-line method as per the useful life prescribed in Schedule II to the Companies Act, 2013 except in respect of the following categories of assets, in whose case the life of the assets has been assessed as under based on technical advice, taking into account the nature of the asset, the estimated usage of the asset, the operating conditions of the asset, past history of replacement, anticipated technological changes, manufacturers warranties and maintenance support, etc.:

- i. Leased vehicles which are depreciated over four years.
- ii. Building and other assets on lease hold land are depreciated over the lease period;
- iii. Individual assets costing less than ₹5000 are depreciated in full in the year of acquisition.
- iv. In respect of Assets held by Subsidiaries and Jointly controlled entities, depreciation is provided based on the useful life of those assets as estimated by the respective Companies.

- v. Assets held by CUMI Australia Pty Limited are depreciated using diminishing value method and that of Ciria India Ltd (joint venture) are depreciated as per the useful life prescribed in Schedule II on Written Down Value basis.

The difference between the depreciation for the year on the revalued assets and the depreciation calculated on the original cost is transferred directly to the General Reserve from the Fixed Assets Revaluation Reserve.

Depreciation on additions to fixed assets is provided on a pro-rata basis from the date of commissioning of the individual asset.

Premium on Lease hold Land is amortised over the tenure of the lease.

- (g) Fixed Assets held for sale are stated at the lower of their net book value and net realisable value and are disclosed separately.
- (h) Intangible assets are amortised over the estimated useful life of the assets on a straight line basis. The estimated useful life of the intangible assets and the amortisation period are reviewed at the end of each financial year and the amortisation period is revised to reflect the changed pattern, if any.

## vii. Impairment of assets

At each balance sheet date, the carrying values of the tangible and intangible assets are reviewed 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 asset is estimated in order to determine the extent of the impairment loss (if any).

Where there is an indication that there is a likely impairment loss for a group of assets, the company estimates the recoverable amount of the group of assets as a whole and the impairment loss is recognised.

## viii. Borrowing costs

Borrowing costs include interest, amortisation of ancillary costs incurred and exchange differences arising from foreign currency borrowings to the extent they are regarded as an adjustment to the interest cost. Costs in connection with the borrowing of funds to the extent not directly related to the acquisition of qualifying assets are charged to the Statement of Profit and Loss over the tenure of the loan. Borrowing costs, allocated to and utilised for qualifying assets, pertaining to the period from commencement of activities relating to construction/development of the



# Notes Forming Part of the Consolidated Financial Statements for the year ended March 31, 2016 (Continued)

qualifying asset upto the date of capitalisation of such assets are added to the cost of the assets. Capitalisation of borrowing costs is suspended and charged to the Statement of Profit and Loss during extended periods when active development activity on the qualifying assets is interrupted.

## ix. Inventories

- (a) Inventories are valued at lower of cost and net realisable value. Cost includes all direct costs and applicable production overheads to bring the goods to the present location and condition. Excise duty on the finished goods is added to the cost.
- (b) In respect of raw materials, accessories and stores and spares cost is determined on weighted average basis which includes freight, taxes and duties net of CENVAT credit wherever applicable, except Ciria India Ltd (joint venture) where cost is determined on First in First out method. Customs duty payable on material in bond is added to cost.
- (c) In respect of the Company, Trading stocks are valued at weighted average cost and in respect of other entities, Trading stocks are valued using First in First out method.

## x. Investments

Long term investments are carried individually at cost less provision for diminution, other than temporary, in the value of such investments.

Current investments are carried individually at lower of cost and fair value.

## xi. Revenue recognition

- (a) Domestic sales are accounted on transfer of significant risks and rewards of ownership to the buyer which generally coincides with despatch of products to customers in the case of domestic sales and on the date of bill of lading in the case of export sales, except in the case of CUMI Australia Pty. Limited where revenue is recognised on delivery of goods. Sales are accounted net of Sales Tax/VAT, discounts and returns as applicable
- (b) Revenue from contracts priced on a time and material basis are recognised when services are rendered and related expenses incurred/on the basis of percentage of completion. In respect of indivisible contracts and Service contracts, the revenues are recognized on percentage completion method, synchronized to the billing schedules agreed by the customers.

The relevant cost is recognised in Accounts in the year of recognition of revenue. Profit so recognised is adjusted to ensure that it does not exceed the estimated overall

contract margin. The total costs of the contracts are estimated based on technical and other estimates. Foreseeable loss, if any, is recognized when it becomes probable and could be estimated.

- (c) Service Income is recognised over the duration of the contract.
- (d) Benefits on account of entitlement to import goods free of duty under various 'Exports Benefits Schemes', are accounted based on eligibility and when there is no uncertainty in receiving the same.
- (e) Interest income is accounted on accrual basis.
- (f) Dividend income on investments is accounted for when the right to receive the payment is established.

## xii. 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.

## xiii. Employee Benefits

Employee benefits include provident fund, superannuation fund, employee state insurance scheme, gratuity fund, compensated absences, long service awards and post-employment medical benefits.

### (a) Defined Contribution Plan :

Fixed contributions to the Superannuation Fund which is administered by Company nominated trustees and managed by Life Insurance Corporation of India and to Employee State Insurance Corporation [ESI] are charged to the Statement of profit and loss, based on the amount of contribution required to be made. Company also contributes to a government administered Pension fund on behalf of its employees, which are charged to the Statement of profit and loss, as and when services are rendered by the employees.

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.

# Notes Forming Part of the Consolidated Financial Statements for the year ended March 31, 2016 (Continued)

## (b) Defined Benefit Plan :

The liability for Gratuity to employees of the Parent and its domestic subsidiaries and domestic joint ventures, as at Balance Sheet date is determined on the basis of actuarial valuation using Projected Unit Credit Method and is funded to a Gratuity fund administered by the trustees and managed by Life Insurance Corporation of India & SBI Life Insurance Ltd and the contribution there of paid/payable is absorbed in the accounts. The actuarial gains/losses are recognised in the Statement of profit and loss.

## (c) Long term Compensated absences :

In respect of long term portion of compensated absences [Leave benefits], the liability is determined on the basis of actuarial valuation and is provided for.

## (d) Short term employee benefits :

Short term employee benefits including compensated absences are determined as per company's policy/scheme are recognised as expense based on expected obligation on undiscounted basis in the case of parent company and other Indian subsidiaries and jointly controlled entities except in the case of Southern Energy Development Corporation Limited, an Indian subsidiary, where leave encashment benefit on retirement to eligible employees is ascertained on actual basis and provided for.

With respect to overseas entities, the Company has provided for employee benefits as per the local regulations.

## (e) Voluntary Retirement Compensation :

Compensation to employees who have retired under voluntary retirement scheme is charged off to revenue.

## (f) Employee Stock Option Scheme :

Stock options granted to the employees under the stock option scheme by Parent company are evaluated as per the accounting treatment prescribed by the Employee Stock Option Scheme and Employee Stock Purchase Scheme Guidelines issued by Securities Exchange Board of India. The Parent Company follows the intrinsic value method of accounting for the options and accordingly, the excess of market value of the stock options as on date of grant, if any, over the exercise price of the options is recognized as deferred employee compensation and is charged to the Statement of profit and loss on graded vesting basis over the vesting period of the options.

## xiv. Foreign currency transactions and translations

- (a) Foreign currency transactions are recorded at the rates of exchange prevailing on the date of transactions. Monetary assets & liabilities outstanding at the year-end are translated at the rate of exchange prevailing at the year-end and profit or loss is recognised in the Statement of profit and loss.
- (b) 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.
- (c) Premium/discount on forward exchange contracts, which are not intended for trading or speculation purposes, 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.
- (d) All overseas subsidiaries are classified as Non-Integral foreign operations. Transactions are translated at average exchange rates and assets and liabilities are translated at closing exchange rates. The resultant exchange difference are accounted in Foreign Currency Translation Reserve.

## xv. Government grants, subsidies and export incentives

Lump sum capital subsidies, not relating to any specific fixed asset, received from Governments for setting up new projects are accounted as capital reserve.

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.

## xvi. CENVAT/Service Tax/VAT

CENVAT/VAT credit on materials purchased/services availed for production/input services are taken into account at the time of purchase and CENVAT/VAT credit on purchase of capital items wherever applicable are taken into account as and when the assets are acquired. The CENVAT/VAT credits so taken are utilised for payment of excise duty on goods manufactured/service tax on output services. The unutilised CENVAT/VAT credit is carried forward in the books.

## xvii. Segment reporting

- (a) The accounting policies adopted for Segment reporting are in line with the accounting policies of the Group with the following additional policies :

# Notes Forming Part of the Consolidated Financial Statements for the year ended March 31, 2016 (Continued)

- (b) Inter-segment revenue is accounted on the basis of transactions which are primarily determined based on market/fair value factors
- (c) 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”.

## xviii. Income Tax

- (a) Current Tax is determined on income for the year chargeable to tax in accordance with the Tax laws in force in the country of incorporation of the respective companies into consolidation.
- (b) Deferred tax is recognised for all the timing differences and is measured using the tax rates and the tax laws enacted or substantively enacted at the reporting date. Deferred Tax assets in respect of unabsorbed depreciation and carry forward of losses are recognized if there is virtual certainty that there will be sufficient future taxable income available to realize such losses. Other deferred tax assets are recognized if there is reasonable certainty that there will be sufficient future taxable income available to realise such assets.
- (c) Current and deferred tax relating to items directly recognised in reserves are recognised in reserves and not in the Statement of Profit and Loss.

## xix. Provisions, Contingent Liabilities and Contingent Assets

Provisions are recognised only when there is a present obligation as a result of past events and when a reliable estimate of the amount of obligation can be made. 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.

## xx. Hedge accounting

The Company uses foreign currency forward contracts to hedge its risks associated with foreign currency fluctuations relating to highly probable forecast transactions. The Company designates such forward contracts in a cash flow hedging relationship by applying the hedge accounting principles set out in “Accounting Standard 30 Financial Instruments: Recognition and Measurement”. These forward contracts are stated at fair value at each reporting date. Changes in the fair value of these forward contracts that are designated and effective as hedges of future cash flows are recognised directly in “Hedging reserve” under Reserves and Surplus, net of applicable deferred income taxes and the ineffective portion is recognised immediately in the Statement of Profit and Loss.

Amounts accumulated in the “Hedging reserve” are reclassified to the Statement of Profit and Loss in the same periods during which the forecasted transaction affects profit and loss. Hedge accounting is discontinued when the hedging instrument expires or is sold, terminated, or exercised, or no longer qualifies for hedge accounting. For forecasted transactions, any cumulative gain or loss on the hedging instrument recognised in “Hedging reserve” is retained until the forecasted transaction occurs. If the forecasted transaction is no longer expected to occur, the net cumulative gain or loss recognised in “Hedging reserve” is immediately transferred to the Statement of Profit and Loss.

## xxi. 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.

# Notes Forming Part of the Consolidated Financial Statements for the year ended March 31, 2016 (Continued)

₹ million

## 3. Share Capital

Particulars	As at 31.03.2016	As at 31.03.2015
<b>Authorised</b>		
387,250,000 equity shares of ₹1 each	387.25	250.00
(Previous year 250,000,000 equity shares of ₹1 each )		
<b>Issued, Subscribed and Paid-up</b>		
188,379,560 equity shares of ₹1 each fully paid (Previous year 188,179,042 equity shares of ₹1 each fully paid)	<b>188.38</b>	<b>188.18</b>

### 3. a) Reconciliation of the shares outstanding at the beginning and at the end of the reporting period

Particulars	As at 31.03.2016		As at 31.03.2015	
	No. of Shares	Value of Shares	No. of Shares	Value of Shares
Equity shares with voting rights				
Number of shares at the beginning of the year	188179042	188.18	187756218	187.76
Add : Shares issued against ESOP scheme	200518	0.20	422824	0.42
<b>Total number of shares outstanding at the end of the year</b>	<b>188379560</b>	<b>188.38</b>	<b>188179042</b>	<b>188.18</b>

### 3. 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.

An interim dividend of ₹1 per share & ₹0.50 were declared at the meetings of the Board of Directors held on February 5, 2016 & March 11, 2016 respectively and the same have been paid (previous year ₹0.75 per share).

Final dividend of ₹0.50 per share proposed for previous year ended March 31, 2015 has been paid during the year.

### 3. c) Details of shares held by shareholders holding more than 5% of the aggregate shares in the Company

Name of Shareholder	As at 31.03.2016		As at 31.03.2015	
	No. of Shares held	% of holding	No. of Shares held	% of holding
Murugappa Holdings Limited	55432284	29.43%	55432284	29.46%
Nalanda India Fund Limited	16793362	8.91%	16793362	8.92%
HDFC Trustee Company Ltd - a/c HDFC Mid-Cap Opportunities fund	9973000	5.29%	9068000	4.82%

# Notes Forming Part of the Consolidated Financial Statements for the year ended March 31, 2016 (Continued)

## 4. Reserves and Surplus

₹ million

Particulars	As at 31.03.2015	Additions	Deductions/ Adjustments	As at 31.03.2016
<b>Capital Reserve</b>				
Fixed assets revaluation reserve	23.52	-	0.68 <sup>(a)</sup>	22.84
Capital subsidy	3.00	-	-	3.00
Profit on Forfeiture of Shares/Warrants	6.03	-	-	6.03
Capital redemption reserve	27.68	-	-	27.68
Securities premium	142.18	24.43 <sup>(b)</sup>	-	166.61
On Consolidation	680.77	39.44 <sup>(c)</sup>	-	720.21
<b>Other Reserves</b>				
General reserve	5189.52	500.68 <sup>(d)</sup>	-	5690.20
Hedging reserve	1.75	1.46	1.75	1.46
Foreign currency translation reserve	(1366.64)	-	207.95 <sup>(e)</sup>	(1574.59)
	<b>4707.81</b>	<b>566.01</b>	<b>210.38</b>	<b>5063.44</b>
Less : Adjustment arising on merger of a subsidiary	(30.81)	-	6.47 <sup>(f)</sup>	(37.28)
Less : Buyback of shares by a subsidiary	(21.42)	-	-	(21.42)
Less : Adjustment arising on derecognition of subsidiaries/ jointventure/associate	(111.67)	-	-	(111.67)
<b>Total</b>	<b>4543.91</b>	<b>566.01</b>	<b>216.85</b>	<b>4893.07</b>
<b>Surplus in Statement of Profit and Loss</b>				
Opening Balance (g)	5609.06	-	-	6155.01
Add : Profits for the current year	1326.01	-	-	1427.91
Less : Transfer to General reserve	(500.00)	-	-	(500.00)
Less : Depreciation transferred to reserve on account of change in depreciation	(31.50)	-	-	-
Less : Final dividend including tax on dividend	(0.06)	-	(h)	(0.03)
Less : Interim dividend	(141.13)	-	-	(282.56)
Less : Dividend tax on interim dividend	(1.39)	-	(i)	(4.18)
Less : Proposed final dividend	(94.09)	-	-	-
Less : Dividend tax on proposed final dividend	(10.56)	-	-	-
Less : Dividend tax paid by subsidiaries & JV during previous year	15.55	-	-	16.88
Less : Dividend tax paid by subsidiaries & JV during current year	(16.88)	-	-	(35.60)
<b>Total</b>	<b>6155.01</b>	-	-	<b>6777.43</b>
<b>Grand Total</b>	<b>10698.92</b>	-	-	<b>11670.50</b>

(a) Represents ₹0.68 million transfer to General reserve.

(b) Premium of ₹24.43 million received on allotment of 200,518 equity shares under Employee Stock Option Scheme 2007.

(c) Exchange difference during the year on translation of capital reserve on consolidation of foreign subsidiary.

(d) Represents ₹0.68 million transfer from revaluation reserve and ₹500 million transfer from current year profit.

(e) Represents Foreign currency translation reserve adjustment arising on account of Translation in accordance with AS 11.

(f) Represents adjustment arising on account of merger of Cellaris Refractories India limited to Parent company.

(g) Includes reserves other than disclosed above relating to subsidiaries and joint ventures which are required under the local laws of respective countries.

(h) Represents dividend of ₹29,160 on 58,320 equity shares allotted under the ESOP Scheme 2007 to the employees, subsequent to the date of approval of the annual accounts by the Board on May 01, 2015 and before the book closure date.

(i) Includes ₹15.39 million in respect of credit availed on the dividend received from an overseas subsidiary - (Refer note no:35)

# Notes Forming Part of the Consolidated Financial Statements for the year ended March 31, 2016 (Continued)

₹million

## 5. Long - term Borrowings

Particulars	As at 31.03.2016	As at 31.03.2015
<b>Secured</b>		
<b>Term Loan from banks</b>		
Others	34.92	52.80
- Secured by a pari-passu first charge on movable fixed assets, both present and future		
<b>Long term maturities of Finance lease obligation - (Refer note no. 33(d))</b>		
- Secured against the assets purchased under the arrangement	18.91	12.63
<b>Unsecured</b>		
<b>Loans from Banks</b>		
- Term loans from Banks	241.50	501.32
<b>Refer Note 10 for Current maturities of the above Long term borrowings</b>	<b>295.33</b>	<b>566.75</b>

## 6. Information relating to Deferred Tax

Particulars	As at 31.03.2016	As at 31.03.2015
<b>A. Deferred Tax liabilities (Net)</b>		
<b>a. Deferred Tax asset arising out of timing difference relating to :</b>		
Provision for doubtful receivables and advances	37.39	34.80
Expenses allowed on payment basis	44.48	3.53
Voluntary retirement scheme payments	19.04	48.20
Leased assets	1.02	1.36
Others	8.57	13.39
	<b>110.50</b>	<b>101.28</b>
<b>b. Deferred Tax Liability arising out of timing difference relating to :</b>		
Depreciation	539.82	570.50
Others	0.10	24.21
	<b>539.92</b>	<b>594.71</b>
<b>Deferred Tax Liabilities (Net)</b>	<b>429.42</b>	<b>493.43</b>
<b>B. Deferred Tax Assets (Net)</b>		
<b>a. Deferred Tax asset arising out of timing difference relating to :</b>		
Provision for compensated absences	5.58	4.83
Expenses allowed on payment basis	12.97	1.80
Others	49.62	87.19
	<b>68.17</b>	<b>93.82</b>
<b>b. Deferred Tax Liability arising out of timing difference relating to :</b>		
Depreciation	6.99	0.05
	<b>6.99</b>	<b>0.05</b>
<b>Deferred Tax Assets (Net)</b>	<b>61.18</b>	<b>93.77</b>
<b>Deferred tax assets/liabilities (Net)</b>	<b>368.24</b>	<b>399.66</b>
Movement during the year	<b>(31.42)</b>	<b>(99.85)</b>
Routed through Profit & loss	(36.55)	(69.42)
Translation impact on account of Fixed asset useful life as per Companies act 2013	-	(16.90)
Translation adjustment impact	5.13	(13.53)
<b>Total</b>	<b>(31.42)</b>	<b>(99.85)</b>

## 7. Long-term provisions

Particulars	As at 31.03.2016	As at 31.03.2015
Provision for Employee benefits - Compensated absences	72.58	50.31
	<b>72.58</b>	<b>50.31</b>

# Notes Forming Part of the Consolidated Financial Statements for the year ended March 31, 2016 (Continued)

₹million

## 8. Short - term borrowings

Particulars	As at 31.03.2016	As at 31.03.2015
<b>Secured loans from Banks</b>		
Cash Credit (repayable on demand)	281.85	143.37
Other Borrowings	-	126.67
the above borrowings are secured by a pari-passu first charge on the current assets, both present and future and pari-passu second charge on immovable properties, both present and future, relating to various manufacturing locations		
<b>Unsecured borrowings from Banks</b>	1988.48	1931.01
	<b>2270.33</b>	<b>2201.05</b>

## 9. Trade payables

Particulars	As at 31.03.2016	As at 31.03.2015
<b>a. Total outstanding dues of micro and small enterprises</b>	21.02	26.68
	21.02	26.68
<b>b. Total outstanding dues of enterprises other than micro and small enterprises</b>		
- Acceptances	-	35.52
- Other than Acceptances	1506.91	1646.09
	<b>1506.91</b>	<b>1681.61</b>

## 10. Other Current liabilities

Particulars	As at 31.03.2016	As at 31.03.2015
<b>Secured :</b>		
Current maturities of Term loans	-	2.72
Current maturities of Finance lease obligations - (Refer note no. 33(d))	6.69	7.18
- Secured against the assets purchased under the arrangement		
Interest accrued but not due on loans	0.78	1.65
<b>Unsecured :</b>		
Current maturities of term loans from Banks	536.00	623.95
Unclaimed dividend	18.98	17.15
Remuneration payable to Directors	19.93	15.65
<b>Other Liabilities</b>		
- Statutory liabilities	136.93	166.39
- Advance from Customers	63.23	89.63
- Deposits	34.75	36.90
- Payables for purchase of Fixed Assets	62.10	61.31
- Other Payables	636.67	510.35
	<b>1516.06</b>	<b>1532.88</b>

## 11. Short-term provisions

Particulars	As at 31.03.2016	As at 31.03.2015
Provision for Employee benefits	151.99	123.01
Proposed dividend	-	94.09
Tax on Proposed dividend	-	15.39
	<b>151.99</b>	<b>232.49</b>

# Notes Forming Part of the Consolidated Financial Statements

## for the year ended March 31, 2016 (Continued)

12. Fixed Assets ₹ million

Particulars	Gross Block			Depreciation/Amortisation			Net Block	
	As on 1.4.2015	Additions/ Adjustments	Deletion/ Adjustments	Reclassified as held for Sale <sup>(e)</sup>	Translation Adjustment	As on 31.3.2016	As on 1.4.2015	As on 31.3.2016
<b>Tangible Assets</b>								
Land								
Freehold	111.93 (a)	9.62	3.80	-	2.24	119.99	-	119.99
Leasehold	239.82	0.00	0.17	83.19	0.59	157.05	19.65	142.98
Buildings	2823.85 (a)	234.19	222.56	251.97	(65.44)	2518.07 (b)	789.49	1735.95
Plant & Machinery	9788.85 (c)	671.01	950.38	-	(184.04)	9325.44	5337.78	3736.59
Plant & Machinery taken on lease	4.04	-	4.04	-	-	0.00	4.04	-
Furniture & Fixtures	235.60	37.22	13.34	-	(0.65)	258.83	152.84	92.05
Vehicles	146.42	29.26	24.57	-	(5.04)	146.07	81.87	64.60
Vehicles taken on lease	32.62	13.39	13.58	-	-	32.43	16.55	21.56
<b>Total</b>	<b>13383.13</b>	<b>994.69</b>	<b>1232.44</b>	<b>335.16</b>	<b>(252.34)</b>	<b>12557.88</b>	<b>6402.22</b>	<b>5913.72</b>
<b>Intangible Assets</b>								
Goodwill	5.10	-	-	-	-	5.10	5.10	-
Software	44.48	22.49	3.72	-	(0.33)	62.92	22.78	23.65
Technical know-how fee/Trademark	203.13	30.67	13.13	-	(0.81)	219.86	104.82	94.35
<b>Total</b>	<b>252.71</b>	<b>53.16</b>	<b>16.85</b>	<b>-</b>	<b>(1.14)</b>	<b>287.88</b>	<b>132.70</b>	<b>118.00</b>
<b>GRAND TOTAL</b>	<b>13635.84</b>	<b>1047.85 (d)</b>	<b>1249.29</b>	<b>335.16</b>	<b>(253.48)</b>	<b>12845.76</b>	<b>6534.92</b>	<b>6031.72</b>

(a) Land & Building includes those added upto 31<sup>st</sup> August 1984 which are stated at revalued amounts based on the valuation done in that year by an independent valuer. The value added on revaluation was ₹58.41 million

(b) Includes ₹721.37 million (Upto Previous year ₹694.46 million) being cost of building on leasehold land.

(c) Net of subsidy received ₹0.77 million.

(d) Includes assets acquired for Research & Development ₹16.35 million (Previous Year ₹30.84 million) - Refer note no. 38

(e) Reclassified as current asset - Refer note no. 28.

(f) Deletion figures is net of impairment.



# Notes Forming Part of the Consolidated Financial Statements

## for the year ended March 31, 2016 (Continued)

### 12. Fixed Assets - Previous year

₹ million

Particulars	Gross Block			Depreciation/Amortisation			Net Block			
	As on 1.4.2014	Additions	Deletion	Translation Adjustment	As on 31.3.2015	As on 1.4.2014	for the year	Deletion Transfer to reserves	As on 31.3.2015	As on 31.3.2015
<b>Tangible Assets</b>										
Land										
Freehold	119.26	0.83	0.12	(8.04)	111.93	-	-	-	-	111.93
Leasehold	234.32	1.83	-	3.67	239.82	15.65	3.67	-	0.33	220.17
Buildings	2924.04	175.25	5.19	(270.25)	2823.85	798.84	92.66	3.40	(103.57)	789.49
Plant & Machinery	9854.87	535.91	57.82	(544.11)	9788.85	4819.23	808.57	54.76	(270.20)	5337.78
Plant & Machinery taken on lease	4.04	-	-	-	4.04	3.75	0.24	-	-	4.04
Furniture & Fixtures	251.90	14.36	20.35	(10.31)	235.60	127.22	33.45	10.61	(7.37)	152.84
Vehicles	185.89	5.24	9.47	(35.24)	146.42	98.06	10.91	5.09	(22.14)	81.87
Vehicles taken on lease	19.80	21.18	8.36	-	32.62	8.47	16.01	7.93	-	16.55
<b>Total</b>	<b>13594.12</b>	<b>754.60</b>	<b>101.31</b>	<b>(864.28)</b>	<b>13383.13</b>	<b>5871.22</b>	<b>965.51</b>	<b>81.79</b>	<b>(402.95)</b>	<b>6402.22</b>
Less: Impairment of tangible assets										(323.18)
<b>Net book value of tangible assets</b>										<b>6657.73</b>
<b>Intangible Assets</b>										
Goodwill	5.10	-	-	-	5.10	5.10	-	-	-	5.10
Software	27.37	17.51	-	(0.40)	44.48	11.03	12.12	-	(0.37)	22.78
Technical know-how fee/Trade mark	202.73	0.95	-	(0.55)	203.13	79.11	26.09	-	(0.38)	104.82
<b>Total</b>	<b>235.20</b>	<b>18.46</b>	<b>-</b>	<b>(0.95)</b>	<b>252.71</b>	<b>95.24</b>	<b>38.21</b>	<b>-</b>	<b>(0.75)</b>	<b>132.70</b>
Less: Impairment of intangible assets										(6.57)
<b>Net book value of intangible assets</b>										<b>113.44</b>
<b>GRAND TOTAL</b>	<b>13829.32</b>	<b>773.06</b>	<b>101.31</b>	<b>(865.23)</b>	<b>13635.84</b>	<b>5966.46</b>	<b>1003.72</b>	<b>81.79</b>	<b>(403.70)</b>	<b>6534.92</b>
Less: Impairment of fixed assets										(329.75)
<b>Net book value of fixed assets</b>										<b>6771.17</b>

# Notes Forming Part of the Consolidated Financial Statements for the year ended March 31, 2016 (Continued)

₹ million

## 13. Non-Current Investments (at cost)

Particulars	As at 31.03.2016	As at 31.03.2015
<b>Quoted</b>		
- Equity shares - fully paid	60.50	60.50
- Others	13.51	6.02
<b>Unquoted</b>		
- Equity shares - fully paid	11.49	11.49
	<b>85.50</b>	<b>78.01</b>

## 14. Long term loans & advances - Unsecured and considered good

Particulars	As at 31.03.2016	As at 31.03.2015
Capital advances	156.38	29.27
Disputed Sales tax, Central excise and Service tax amounts deposited under protest	22.01	19.34
Taxation (net of provisions)	106.35	108.87
Security deposits	103.21	96.08
	<b>387.95</b>	<b>253.56</b>

## 15. Current Investment (at lower of cost and fair value)

Particulars	As at 31.03.2016	As at 31.03.2015
Investment in Mutual fund - Short term	285.42	333.25

## 16. Inventories (at lower of cost and net realisable value)

Particulars	As at 31.03.2016	As at 31.03.2015
Raw materials (In Transit - ₹144.97 million ; Previous year : ₹108.94 million)	1079.90	1095.49
Work-in-process	935.50	749.83
Stock in Trade (In transit - ₹38.29 million :Previous year : ₹7.38 million)	744.71	661.42
Finished stock	775.29	1043.41
Stores and spare parts (In transit - ₹0.45 million ; Previous year : ₹0.39 million)	330.98	333.16
	<b>3866.38</b>	<b>3883.31</b>

## 17. Trade receivable

Particulars	As at 31.03.2016	As at 31.03.2015
<b>Outstanding over a period exceeding six months from the date they were due for payment</b>		
Considered good	160.18	277.27
Considered doubtful	152.83	97.97
	<b>313.01</b>	<b>375.24</b>
<b>Other Receivables</b>		
Considered good	3787.38	3425.61
	<b>4100.39</b>	<b>3800.85</b>
<b>Less : Provision for doubtful receivables</b>	<b>152.83</b>	<b>97.97</b>
	<b>3947.56</b>	<b>3702.88</b>

# Notes Forming Part of the Consolidated Financial Statements for the year ended March 31, 2016 (Continued)

₹ million

## 18. Cash and Bank balances

Particulars	As at 31.03.2016	As at 31.03.2015
Cash on hand	13.87	15.15
Balances with banks :		
- Current account	1137.09	962.51
- Deposit account with original maturity within three months	7.07	1.63
- In earmarked account : Unclaimed dividend account	15.19	12.36
	<b>1173.22</b>	<b>991.65</b>

## 19. Short-term loans & advances

Particulars	As at 31.03.2016	As at 31.03.2015
(Unsecured and considered good, unless otherwise stated)		
Deposits	9.02	24.90
Loans and Advance to Employees	20.28	15.34
Prepaid Expenses	86.76	84.97
Trade Advances	185.57	182.91
Claims recoverable	0.02	0.04
Other loans & Advances		
Considered good	82.51	51.47
Considered doubtful	26.40	26.32
	<b>108.91</b>	<b>77.79</b>
Less : Provision for doubtful advances	26.40	26.32
	<b>82.51</b>	<b>51.47</b>
Balances with statutory authorities	219.82	193.91
	<b>603.98</b>	<b>553.54</b>

## 20. Revenue from Operations

Particulars	2015-16	2014-16
Sale of Products (Refer Note no: 32 (B) Segment Disclosure for breakup of Sales)	21325.93	20944.85
Sale of Services/Income from Contracts	398.54	366.14
Other Operating Revenue		
Service income	81.29	87.41
Commission Income	3.02	1.11
Scrap Sales	101.39	96.99
Miscellaneous income	93.85	129.43
	<b>22004.02</b>	<b>21625.93</b>
Less : Excise duty	1160.61	1124.22
	<b>20843.41</b>	<b>20501.71</b>

# Notes Forming Part of the Consolidated Financial Statements for the year ended March 31, 2016 (Continued)

₹ million

## 21. Changes in inventories of finished goods, work-in-process and stock-in-trade

Particulars	2015-16	2014-15
a) Opening stock		
Work-in-process	749.83	866.49
Stock in Trade	661.42	569.25
Finished stock	1043.41	1130.77
	<b>2454.66</b>	<b>2566.51</b>
b) Closing stock		
Work-in-process	935.50	749.83
Stock in Trade	744.71	661.42
Finished stock	775.29	1043.41
	<b>2455.50</b>	<b>2454.66</b>
<b>(Accretion)/Decretion to stock</b>	<b>(0.84)</b>	<b>111.85</b>

## 22. Employee benefits expense

Particulars	2015-16	2014-15
Salaries, wages and bonus	2162.66	2186.06
Contribution to provident and other funds	159.29	152.64
Voluntary retirement compensation	0.40	0.36
Remuneration to Managing director	17.44	15.32
Welfare expenses	375.42	399.98
	<b>2715.21</b>	<b>2754.36</b>

# Notes Forming Part of the Consolidated Financial Statements for the year ended March 31, 2016 (Continued)

₹ million

## 23. Other expenses

Particulars	2015-16	2014-15
Consumption of stores and spares	786.02	738.83
Power and fuel <sup>(a)</sup>	2535.02	3035.56
Rent	108.04	113.74
Excise duty on stock differential <sup>(c)</sup>	(8.00)	16.18
Rates and taxes	187.66	232.03
Insurance	48.65	58.51
Repairs to : <sup>(b)</sup>		
- Buildings	124.61	80.63
- Machinery	688.48	732.30
- Others	18.27	15.22
Data Processing Charges	107.36	92.82
Technical Fee/Royalty	78.50	49.73
Directors' sitting fees	2.13	1.77
Commission to non-whole-time Directors	14.50	11.56
Auditors' remuneration	16.43	17.44
Travel and Conveyance	249.16	243.46
Freight, delivery and shipping charges	654.33	655.00
Selling commission	66.94	65.11
Prompt payment discount	78.93	78.70
Advertisement and publicity	79.13	77.11
Printing, stationery and communication	66.28	63.02
Bad receivables and advances written off	3.88	7.30
Less : Provision adjusted	(2.26)	(6.31)
	1.62	0.99
Provision for doubtful receivables, advances and deposits	85.22	86.30
Professional fees	198.57	169.13
Service outsourced	1066.23	974.04
Loss on sale of Fixed assets	64.40	13.67
Miscellaneous expenses	303.24	313.89
	<b>7621.72</b>	<b>7936.74</b>
(a) Net of own power generation, which includes energy banked with KSEB - ₹44.82 million (previous year ₹Nil)	143.01	172.87
(b) Include stores and spare parts	221.54	201.62
(c) Represents excise duty relating to difference between the opening and closing stock of finished goods. The excise duty shown as deduction from sales in revenue from operations - Note no. 20 represents excise duty on sales during the year.		

# Notes Forming Part of the Consolidated Financial Statements for the year ended March 31, 2016 (Continued)

₹ million

## 24. Finance Costs

Particulars	2015-16	2014-15
Interest		
- On fixed loans	133.71	178.58
- On others	87.76	70.58
Other borrowing costs	5.79	4.26
	<b>227.26</b>	<b>253.42</b>

## 25. Other income

Particulars	2015-16	2014-15
Dividend Income from Long term Investments	6.90	4.11
Dividend Income from Current Investments	6.13	15.68
<b>Interest Income</b>		
from banks	40.25	28.92
from others	5.65	6.19
<b>Other Income</b>		
Profit on sale of Fixed Assets	24.96	35.68
Profit on sale of Investments (net)	8.99	5.00
Profit on exchange fluctuation (net)	152.84	90.96
Provision for expenses no longer required written back	28.87	9.21
Provision for doubtful receivables/advances no longer required written back	28.02	50.50
Rental Income	2.12	2.42
Miscellaneous income	26.63	13.18
	<b>331.36</b>	<b>261.85</b>

26. Pending approval of the proposed final dividends in the annual general meetings of the respective subsidiaries and joint ventures, the same are not considered in the consolidated accounts as proposed dividends and are included under Surplus in Statement of Profit and loss under Reserves and Surplus.

# Notes Forming Part of the Consolidated Financial Statements for the year ended March 31, 2016 (Continued)

₹ million

## 27. Contingent Liabilities and Commitments in respect of which no provision is considered necessary:

Particulars	As at 31.03.2016	As at 31.03.2015
<b>A. Contingent Liabilities:</b>		
(a) Outstanding Bills discounted	38.99	7.17
(b) Outstanding letters of credit	108.54	90.06
(c) Disputed income tax, sales tax, excise duty, service tax and customs duty demands which are under various stages of appeal proceedings.	240.82	247.78
(d) Claims against the company not acknowledged as debts :		
i. Disputed demands by Electricity Board	35.04	48.27
ii. Contested Provident fund and ESI demands	0.21	0.21
iii. Others	74.75	67.23
	<b>110.00</b>	<b>115.71</b>
(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>B. Commitments:</b>		
Estimated amount of contracts remaining to be executed and not provided for :		
- Towards capital account	<b>250.01</b>	<b>105.90</b>

## 28. Details of fixed assets held for sale

Particulars	As at 31.03.2016	As at 31.03.2015
Building	206.90	-
Leasehold land	73.40	-
<b>Total</b>	<b>280.30</b>	-

## 29. Disclosure relating to Contracts:

Particulars	As at 31.03.2016	As at 31.03.2015
Contract revenue recognised during the year	141.65	146.49
Retentions	7.35	7.28
Receivables (net of retention)	46.18	37.48

# Notes Forming Part of the Consolidated Financial Statements for the year ended March 31, 2016 (Continued)

₹ million

## 30. Employee benefits

Particulars	As at 31.03.2016	As at 31.03.2015
(a) Employee benefits in respect of the company, its subsidiaries and jointly controlled entities incorporated in India have been in accordance with the revised Accounting Standard 15(Revised) on Employee Benefits. Employee benefits pertaining to overseas subsidiaries have been accrued based on their respective regulations.		
(b) The details of actuarial valuation in respect of Gratuity liability of the Company, its domestic subsidiaries and joint controlled entities as at 31 <sup>st</sup> March 2016 are given below :		
<b>i. Projected benefit obligation as at beginning of the year</b>	259.41	242.98
Service cost	25.54	22.22
Interest cost	19.90	18.59
Actuarial (Gains)/Losses	6.82	(0.57)
Benefits paid	(21.29)	(23.81)
<b>Projected benefit obligation as at end of the year</b>	<b>290.38</b>	<b>259.41</b>
<b>ii. Fair value of plan assets as at beginning of the year</b>	237.05	196.45
Expected return on plan assets	20.05	17.30
Contributions	28.82	45.26
Benefits paid	(21.29)	(23.21)
Actuarial (loss)/Gain on plan assets	1.52	1.25
<b>Fair value of plan assets as at end of the year</b>	<b>266.15</b>	<b>237.05</b>
<b>iii. Amount recognised in the balance sheet :</b>		
Projected benefit obligation at the end of the year	290.38	259.41
Fair value of the plan assets at the end of the year	266.15	237.05
(Liability)/Asset recognised in the Balance sheet	<b>(24.23)</b>	<b>(22.36)</b>
<b>iv. Cost of the defined plan for the year :</b>		
Current service cost	25.54	22.22
Interest on obligation	19.90	18.59
Expected return on plan assets	(20.05)	(17.30)
Net actuarial (gains)/losses recognised in the year	5.27	(1.82)
Net cost recognised in the Statement of Profit and Loss	<b>30.66</b>	<b>21.69</b>
<b>v. Assumptions :</b>		
Discount rate	7.8% to 8.1%	8%
Expected rate of return	8%	8%
Mortality table used	Indian assured lives mortality (2006-08) Ultimate	

### Notes:

- (a) Estimates of future salary increase take account of inflation, seniority, promotion and other relevant factors, such as supply and demand in the employment market.
- (b) 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.



# Notes Forming Part of the Consolidated Financial Statements for the year ended March 31, 2016 (Continued)

₹ million

vi. Experience Adjustment	31-Mar-16	31-Mar-15	31-Mar-14	31-Mar-13	31-Mar-12
Present value of defined benefit obligation	290.38	259.41	242.98	199.43	188.15
Fair value of plan assets	266.15	237.05	196.45	192.99	160.48
Balance sheet (Liability)/Asset	(24.23)	(22.36)	(46.53)	(6.44)	(27.67)
P & L (Income)/expenses	30.66	21.69	45.88	9.72	33.61
Experience adjustment on plan liabilities (gain)/loss	6.82	(0.57)	27.03	(9.96)	23.03
Experience adjustment on plan assets gain/(loss)	1.52	1.25	(0.42)	1.06	(0.05)

- (c) With respect to the Provident Fund Trust administered by the Company, the Company shall make good the deficiency, if any, in the interest rate declared by Trust below statutory limit. Having regard to the assets of the Fund and the return on the investments, the Company does not expect any deficiency in the foreseeable future.

## 31. Related Party Disclosures

- (a) List of related parties

### Jointly controlled entities

Murugappa Morgan Thermal Ceramics Ltd	[MMTCL]
Ciria India Ltd	[Ciria]
Wendt (India) Ltd	[Wendt]

### Key Management Personnel:

Mr. K Srinivasan, Managing Director	[MD]
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- (b) Details of transactions with related parties during the year ended March 31, 2016

₹ million

Particulars	Jointly Controlled Entities		Key Management Personnel		Total	
	2015-16	2014-15	2015-16	2014-15	2015-16	2014-15
1 Income from Sales and services	117.93	89.47	-	-	117.93	89.47
2 Dividend Income	63.55	75.57	-	-	63.55	75.57
3 Purchase of goods	21.99	46.12	-	-	21.99	46.12
4 Reimbursement of employee cost	0.12	0.12	-	-	0.12	0.12
5 Expenditure on other services	2.65	-	-	-	2.65	-
6 Rental expenses	1.50	1.48	-	-	1.50	1.48
7 Managerial Remuneration	-	-	17.47	15.90	17.47	15.90
8 Trade and other receivables	82.12	34.76	-	-	82.12	34.76
9 Payables	6.46	2.89	-	-	6.46	2.89
10 Deposit Outstanding	1.00	1.00	-	-	1.00	1.00

# Notes Forming Part of the Consolidated Financial Statements for the year ended March 31, 2016 (Continued)

₹ million

(c) Details of transactions with Related Parties during the year ended 31<sup>st</sup> March 2016

Particulars	Jointly Controlled Entities			Total	Key Management Personnel	Total
	Wendt	MMTCL	Ciria			
1 Income from Sales and services	25.40	17.11	75.42	117.93	-	117.93
2 Dividend Income	19.93	28.62	15.00	63.55	-	63.55
3 Purchase of goods	14.51	7.48	-	21.99	-	21.99
4 Reimbursement of employee cost	0.12	-	-	0.12	-	0.12
5 Expenditure on other services	2.65	-	-	2.65	-	2.65
6 Rental expenses	1.50	-	-	1.50	-	1.50
7 Managerial Remuneration	-	-	-	-	17.47	17.47
8 Trade and other receivables	25.45	17.54	39.13	82.12	-	82.12
9 Payables	4.77	1.69	-	6.46	-	6.46
10 Deposit Outstanding	1.00	-	-	1.00	-	1.00

(d) Details of transactions with Related Parties during the year ended 31<sup>st</sup> March 2015

Particulars	Jointly Controlled Entities			Total	Key Management Personnel	Total
	Wendt	MMTCL	Ciria			
1 Income from Sales and services	21.37	16.50	51.60	89.47	-	89.47
2 Dividend Income	19.93	34.34	21.30	75.57	-	75.57
3 Purchase of goods	25.04	21.08	-	46.12	-	46.12
4 Reimbursement of employee cost	0.12	-	-	0.12	-	0.12
5 Rental expenses	1.48	-	-	1.48	-	1.48
6 Managerial Remuneration	-	-	-	-	15.90	15.90
7 Trade and other receivables	15.55	8.08	11.13	34.76	-	34.76
8 Payables	2.62	0.27	-	2.89	-	2.89
9 Deposit Outstanding	1.00	-	-	1.00	-	1.00

# Notes Forming Part of the Consolidated Financial Statements for the year ended March 31, 2016 (Continued)

## 32 (A) Notes to Segmental Reporting

### (i) Business Segments

The Company has considered business segment as the primary segment for disclosure. The business segments are : Abrasives, Ceramics, Electro-minerals, IT services and Power. Abrasive segment comprise of Bonded, Coated, Processed cloth, Polymers, Power tools and Coolants.

Ceramics comprise of Super Refractories, Industrial Ceramics, Bio ceramics, Ceramic Fibre products, Anti-corrosives and Calcia Stabilised Zirconia.

Electrominerals include abrasive/refractory grains, micro grits for the photovoltaic industry and captive power generation from hydel power plant.

IT services include web enabling services and digitised data capture.

Power denotes the generation of power from Natural Gas.

The above segments have been identified taking into account the organisation structure as well as the differing risks and returns of these segments.

### (ii) Geographical Segments

The geographical segments considered for disclosure are : India and Rest of the world. The manufacturing facilities and Sales offices are located in India, USA, Australia, Canada, Middleeast (RAK), Russia, South Africa, China and Czech Republic.

Geographical revenues are segregated based on the location of the customer who is invoiced or in relation to which the revenue is otherwise recognized.

(iii) Segmental assets includes all operating assets used by respective segment and consists principally of operating cash, debtors, inventories and fixed assets net of allowances and provisions. Segmental liabilities include all operating liabilities and consist primarily of creditors and accrued liabilities. Segment assets and liabilities do not include income tax assets and liabilities.

# Notes Forming Part of the Consolidated Financial Statements

## for the year ended March 31, 2016 (Continued)

### 32 (B) Segment Disclosure

#### A. PRIMARY SEGMENT INFORMATION

PARTICULARS	Abrasives		Ceramics		Electrominerals		IT Services		Power		Eliminations		Total	
	15-16	14-15	15-16	14-15	15-16	14-15	15-16	14-15	15-16	14-15	15-16	14-15	15-16	14-15
<b>1. REVENUE</b>														
Revenue from Operations	9833.13	9294.20	4744.10	4895.19	6668.71	6698.39	32.27	22.12	47.72	34.95			21325.93	20944.85
Less : Excise Duty	743.80	726.33	244.32	243.23	172.49	154.66	-	-	-	-			1160.61	1124.22
<b>Net External Sales</b>	<b>9089.33</b>	<b>8567.87</b>	<b>4499.78</b>	<b>4651.96</b>	<b>6496.22</b>	<b>6543.73</b>	<b>32.27</b>	<b>22.12</b>	<b>47.72</b>	<b>34.95</b>			<b>20165.32</b>	<b>19820.63</b>
Sale of Services/Income from Contracts	10.92	15.36	144.80	141.04	-	-	242.82	209.74					398.54	366.14
Inter segment Revenue	16.41	6.40	32.93	23.96	817.97	731.19	20.69	19.91	171.32	145.44	(1059.32)	(926.90)		
<b>Total Revenue</b>	<b>9116.66</b>	<b>8589.63</b>	<b>4677.51</b>	<b>4816.96</b>	<b>7314.19</b>	<b>7274.92</b>	<b>295.78</b>	<b>251.77</b>	<b>219.04</b>	<b>180.39</b>	<b>(1059.32)</b>	<b>(926.90)</b>	<b>20563.86</b>	<b>20186.77</b>
<b>2. RESULT</b>														
Segment result	891.95	627.02	659.40	677.59	1,299.42	797.09	24.57	23.37	29.29	12.58			2904.63	2137.65
Profit on sale of Fixed Assets (Net)	(3.42)	(5.51)	(2.61)	29.44	(30.57)	(3.76)	-	-	-	-			(36.60)	20.17
Unallocated corporate exp	-	(192.21)	-	(7.20)	-	(104.80)	-	-	-	-			(269.89)	(325.25)
Exceptional items	-	-	-	-	-	-	-	-	-	-			(227.26)	(253.42)
Interest expense	-	-	-	-	-	-	-	-	-	-			58.93	54.90
Interest and dividend income	-	-	-	-	-	-	-	-	-	-			8.99	5.00
Profit/(Loss) on sale of investments	-	-	-	-	-	-	-	-	-	-			(895.30)	(821.55)
Income taxes	-	-	-	-	-	-	-	-	-	-			(115.59)	(56.49)
Minority interest	-	-	-	-	-	-	-	-	-	-			1427.91	1326.01
<b>Net profit after tax</b>	<b>888.53</b>	<b>429.30</b>	<b>656.79</b>	<b>699.83</b>	<b>1268.85</b>	<b>688.53</b>	<b>24.57</b>	<b>23.37</b>	<b>29.29</b>	<b>12.58</b>			<b>16826.12</b>	<b>16589.56</b>
<b>3. OTHER INFORMATION</b>														
Segment assets	6294.99	6525.43	4573.80	4540.51	5696.07	5204.45	90.67	89.01	170.59	230.16			2009.79	1660.77
Unallocated corporate assets *													18835.91	18250.33
<b>Total assets</b>	<b>6294.99</b>	<b>6525.43</b>	<b>4573.80</b>	<b>4540.51</b>	<b>5696.07</b>	<b>5204.45</b>	<b>90.67</b>	<b>89.01</b>	<b>170.59</b>	<b>230.16</b>			<b>2502.32</b>	<b>2538.00</b>
Segment liabilities	1188.87	1029.54	575.79	538.70	669.94	913.49	10.84	14.72	56.88	41.55			4474.71	4825.23
Unallocated corporate liabilities #													6977.03	7363.23
<b>Total liabilities</b>	<b>1188.87</b>	<b>1029.54</b>	<b>575.79</b>	<b>538.70</b>	<b>669.94</b>	<b>913.49</b>	<b>10.84</b>	<b>14.72</b>	<b>56.88</b>	<b>41.55</b>			<b>1127.38</b>	<b>10512.94</b>
Capital expenditure	227.17	275.37	483.74	223.84	929.28	261.05	5.19	4.32	-	11.66			5698.74	6076.62
Depreciation & Amortization	310.02	328.70	295.41	285.80	275.48	322.72	9.45	10.46	40.71	40.22			16826.12	16589.56
Non-Cash expenses other than Depreciation	29.90	24.50	21.68	35.96	39.58	4.29	0.96	0.46	-	-			1127.38	10512.94

#### B. SECONDARY SEGMENT INFORMATION

1. Revenue by Geographical market	India		Rest of the world		Total
	15-16	14-15	15-16	14-15	
<b>Total</b>	<b>31.03.16</b>	<b>31.03.15</b>	<b>11621.10</b>	<b>10962.01</b>	<b>8942.76</b>
<b>2. Carrying amount of Segment Assets</b>	<b>20563.86</b>	<b>20186.77</b>			
India	1127.38	10512.94			
Rest of the world	5698.74	6076.62			
<b>Total</b>	<b>16826.12</b>	<b>16589.56</b>			
<b>3. Additions to Fixed Assets and Intangible Assets</b>	<b>688.38</b>	<b>494.32</b>			
India	334.88	259.65			
Rest of the world	1023.26	753.97			
<b>Total</b>	<b>1023.26</b>	<b>753.97</b>			

\* Includes Goodwill of ₹1214.51 million (Previous Year ₹1156.02 million)

# Includes Minority Interest of ₹713.39 million (Previous Year ₹578.03 million)

# Notes Forming Part of the Consolidated Financial Statements for the year ended March 31, 2016 (Continued)

₹ million

## 33. Notes relating to Leases

Particulars	2015-16	2014-15
a. Cost of Leased Assets		
Vehicles/Data processing Equipments	32.43	36.66
b. Net Carrying amount	21.56	16.07
c. Reconciliation between Total Minimum Lease payments and their Present value :		
Total Minimum Lease Payments	34.37	25.08
Less : Future Liability on Interest account	(8.77)	(5.27)
Present value of Lease payments	25.60	19.81

d. Yearwise Future Minimum lease rental payments :	Total Minimum Lease Payments as on 31.03.2016	Present value of Lease payments as on 31.03.2016	Total Minimum Lease Payments as on 31.03.2015	Present value of Lease payments as on 31.03.2015
(i) Not later than one year	9.96	6.69	9.59	7.18
(ii) Later than one year and not later than five years	24.41	18.91	15.49	12.63
(iii) Later than five years	Nil	Nil	Nil	Nil

e. The Company has taken certain premises under operating leases cancellable at mutual option. Hence no disclosure in this regard has been made.

## 34. Information relevant for Accounting Standard 20 - Earnings per share

Particulars	2015-16	2014-15
The calculation of the Basic and Diluted Earning per share is based on the following data:		
Net Profit for the year after Taxes and Minority Interest	1427.91	1326.01
Weighted average number of equity shares outstanding during the year		
Basic	188276270	187942989
Dilutive	188669852	188446811
Earnings per Share - Basic (₹)	7.58	7.06
Earnings per Share - Diluted (₹)	7.57	7.04

35. Dividend Tax on the second Interim Dividend (March 2016) has been paid after availing the credit amounting to ₹2.06 million (Previous year - nil) in respect of the tax paid on the dividends received from a domestic subsidiary. Dividend Tax on the first Interim Dividend (Feb 2016) has been paid after availing the credit amounting to ₹ 35.89 million (Previous year - ₹26.83 million) in respect of the tax paid on the dividends received from an overseas subsidiary. Dividend tax paid on the final dividend approved during last AGM is NIL (previous year ₹8.91 million) is after considering an amount of ₹15.39 million (previous year ₹4.83 million) relating to the dividends received from two overseas subsidiaries and ₹3.77 million (previous year ₹2.23 million) relating to dividends received from two domestic subsidiaries.

# Notes Forming Part of the Consolidated Financial Statements for the year ended March 31, 2016 (Continued)

₹ million

## 36 . Goodwill on consolidation :

Particulars	31.03.2016	31.03.2015
Opening Balance	1156.02	1104.69
Add : Exchange difference during the year on translation of Goodwill of foreign subsidiaries	64.96	51.33
Less: On merger of subsidiary during the year	(6.47)	-
<b>Total</b>	<b>1214.51</b>	<b>1156.02</b>

## 37. Exceptional item:

Particulars	31.03.2016	31.03.2015
Profit on sale of land and building by Parent company	-	869.20
Restructuring/Impairment (net) *	-	(304.20)
Total Exceptional Income/(Expense) (Net)	-	565.00

\* Due to challenging business conditions in the company's overseas stepdown subsidiaries in South Africa and China the Company has formalised a restructuring programme. Further, the stepdown subsidiary in USA has started covering Canadian business and the Canadian subsidiary is in the process of closure(wound up on 22<sup>nd</sup> May 2015). The consequential impact of the above has been recognised.

## 38. Research and Development expenditure incurred during the year is given below:

### a. Revenue Expenditure (disclosed under respective heads of expenditure)

Particulars	2015-16	2014-15
Direct Material, Supplies and Consumables	31.18	28.96
Employee Benefit Expenses	33.68	32.49
Repair & Maintenance	2.30	1.94
Other Expenses	18.46	22.76
Depreciation	10.19	10.40
<b>Total Revenue Expenditure</b>	<b>95.81</b>	<b>96.55</b>

### b. Capital Expenditure (disclosed in Note 12 under the respective heads)

Particulars	2015-16	2014-15
Buildings	4.62	0.16
Plant & Machinery	7.21	29.62
Furniture & Fixtures	3.44	0.63
Intangibles	1.08	0.43
Total Capital Additions	16.35	30.84
Capital Work-in-Progress	1.24	4.54
<b>Total Capital Expenditure (including CWIP)</b>	<b>17.59</b>	<b>35.38</b>

## 39. Previous years figures have been regrouped wherever necessary to conform to current year's grouping.

# AOC-1

(Pursuant to first proviso to sub-section (3) of section 129 read with rule 5 of Companies (Accounts) Rules, 2014)

Statement containing salient features of the financial statement of subsidiaries/associate companies/joint ventures.

₹ million

## (a) Summary financial information of Subsidiary Companies

Reporting currency	RUB		Rand		AUD		INR		USD	
Exchange rate	0.90	0.90	4.47	4.47	50.75	50.75			66.33	66.33
Particulars	Volzhsky Abrasive Works		Foskor Zirconia Pty Ltd		CUMI Australia Pty. Ltd		Sterling Abrasives Limited		CUMI International Ltd	
Financial year ended	2015	2014	2015-16	2014-15	2015-16	2014-15	2015-16	2014-15	2015	2014
1. Share capital	3.24	3.24	0.00	0.00	25.42	25.42	9.00	9.00	1707.16	1591.91
2. Reserves & Surplus	2301.20	1900.48	180.16	125.28	470.19	470.19	365.57	341.34	1016.73	1181.93
3. Total Liabilities <sup>(a)</sup>	284.27	204.56	599.71	914.11	205.08	231.39	262.52	291.69	971.89	1971.71
4. Total Assets <sup>(b)</sup>	2588.71	2108.28	779.87	1039.39	700.69	727.00	637.09	642.03	3695.78	4745.55
5. Investments	0.06	0.07	-	-	-	-	-	-	3401.83	4552.98
6. Turnover	4198.17	3117.60	921.35	1042.38	844.60	817.22	630.83	635.87	214.19	317.15
7. Profit before Tax	729.65	407.64	84.50	(25.17)	129.70	132.22	78.91	82.23	(965.77)	249.01
8. Provision for Taxation	170.41	87.67	28.97	(7.05)	37.88	39.99	27.27	28.72	10.60	15.66
9. Profit after Tax	559.24	319.97	55.53	(18.12)	91.82	92.23	51.64	53.51	(976.37)	233.35
10. Proposed dividend <sup>(c)</sup>	289.64	147.12	-	-	91.82	92.23	27.08	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	10.22	10.22	4.47	4.47					66.33	66.33
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	2015	2014	2015-16	2014-15	2015-16	2014-15	2015-16	2014-15	2015-16	2014-15
1. Share capital	829.34	829.34	0.01	0.01	4.60	4.60	16.00	16.00	1.81	1.81
2. Reserves & Surplus	(841.95)	(753.86)	(7.25)	57.02	204.84	181.57	64.90	48.23	12.35	22.78
3. Total Liabilities <sup>(a)</sup>	650.01	626.92	12.31	47.40	10.83	89.56	58.19	53.65	42.40	38.66
4. Total Assets <sup>(b)</sup>	637.40	702.40	5.07	104.43	220.27	275.73	139.09	117.88	56.56	63.25
5. Investments	-	-	-	-	20.99	29.48	14.92	13.79	-	-
6. Turnover	315.33	311.24	3.62	345.65	225.26	186.44	296.83	252.48	128.72	135.04
7. Profit before Tax	(88.07)	(154.88)	(64.27)	(246.33)	30.28	8.00	25.11	23.25	(10.43)	9.77
8. Provision for Taxation	0.01	-	-	-	7.02	0.74	8.44	7.35	-	-
9. Profit after Tax	(88.08)	(154.88)	(64.27)	(246.33)	23.26	7.26	16.67	15.90	(10.43)	9.77
10. Proposed dividend <sup>(c)</sup>	-	-	-	-	-	-	-	6.06	-	6.63
11. % of Shareholding	100.00	100.00	100.00	100.00	84.76	84.76	100.00	100.00	100.00	100.00

# AOC-1 (Continued)

₹ million

Reporting currency	USD		CZK	
Exchange Rate	66.33	66.33	2.68	2.68
Particulars	CUMI America Inc		CUMI Europe s.r.o	
Financial year ended	2015-16	2014-15	2015	2014
1. Share capital	122.71	122.71	73.97	73.97
2. Reserves & Surplus	(144.49)	(90.59)	(11.00)	-
3. Total Liabilities <sup>(a)</sup>	499.55	410.34	7.32	-
4. Total Assets <sup>(b)</sup>	477.77	442.46	70.29	73.97
5. Investments	-	-	-	-
6. Turnover	346.76	301.80	14.96	-
7. Profit before Tax	(69.57)	(52.33)	(11.00)	-
8. Provision for Taxation	(15.67)	(11.87)	-	-
9. Profit after Tax	(53.90)	(40.46)	(11.00)	-
10. Proposed dividend <sup>(c)</sup>	-	-	-	-
11. % of Shareholding	100.00	100.00	100.00	100.00

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 Volshky Abrasive Works, Russia, dividend for 2015 is due for consideration by the shareholders in June 2016.

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 31.03.2016/31.12.2015, as applicable.

e. The conversion rates have been maintained at the same for the previous financial year for comparative purposes.

f. Investments in VAW, Foskar, 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

Sl. No.	Name of Associates/Joint Ventures	Wendt (India) Limited	Ciria India Limited	Murugappa Morgan Thermal Ceramics Limited
1	Latest audited Balance Sheet Date	31.03.2016	31.03.2016	31.03.2016
2	Shares of Associate/Joint Ventures held by the company on the year end			
	No. of shares	797352	59998	1430793
	Amount of Investment in Associates/ Joint Venture ₹ in million	10.36	1.68	44.04
	Extent of Holding %	39.87	30.00	49.00
3	Description of how there is significant influence	Through shareholding	Through shareholding	Through shareholding
4	Reason why the associate/joint venture is not consolidated	Not applicable as the financials of this joint venture is consolidated in the Company's Consolidated Financials	Not applicable as the financials of this joint venture is consolidated in the Company's Consolidated Financials	Not applicable as the financials of this joint venture is consolidated in the Company's Consolidated Financials
5	Networth attributable to Shareholding as per latest audited Balance Sheet	418.62	64.63	598.11
6	Profit/Loss for the year	101.05	51.55	190.87
	Considered in Consolidation	40.29	15.46	93.52
	Not Considered in Consolidation	60.76	36.08	97.35



# Independent Auditor's Report

To  
The Members of Carborundum Universal Limited

## Report on the Standalone Financial Statements

We have audited the accompanying standalone financial statements of **Carborundum Universal Limited** ("the Company"), which comprise the Balance Sheet as at 31<sup>st</sup> March, 2016, the Statement of Profit and Loss, the Cash Flow Statement for the year then ended, and a summary of the significant accounting policies and other explanatory information.

## Management's Responsibility for the Financial Statements

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 financial statements that give a true and fair view of the financial position, financial performance and cash flows of the Company in accordance with the accounting principles generally accepted in India, including the Accounting Standards specified 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 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 financial statements that give a true and fair view and are free from material misstatement, whether due to fraud or error.

## Auditors' Responsibility

Our responsibility is to express an opinion on these standalone financial statements based on our audit.

We have taken into account the provisions of the Act, 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 and the Order under section 143(11) of the Act.

We conducted our audit in accordance with the Standards on Auditing specified under Section 143(10) of the Act. Those Standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and the disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the 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 financial statements that give a true and fair view in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on whether the Company has in place an adequate internal financial controls system over financial reporting and the operating effectiveness of such controls. 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 financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion on the standalone financial statements.

## Opinion

In our opinion and to the best of our information and according to the explanations given to us, the aforesaid 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 31<sup>st</sup> March, 2016, its profit and its cash flows for the year ended on that date.

## Report on Other Legal and Regulatory Requirements

- (1) 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, and the Cash Flow Statement dealt with by this Report are in agreement with the books of account.
  - (d) In our opinion, the aforesaid standalone financial statements comply with the Accounting Standards specified under Section 133 of the Act.

# Independent Auditor's Report (Continued)

- (e) On the basis of the written representations received from the directors as on 31<sup>st</sup> March, 2016 taken on record by the Board of Directors, none of the directors is disqualified as on 31<sup>st</sup> March, 2016 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 over financial reporting of the Company and the operating effectiveness of such controls, refer to our separate Report in "Annexure A". Our report expresses an unmodified opinion on the adequacy and operating effectiveness of the Company's internal financial controls over financial reporting.
- (g) With respect to the other matters to be included in the Auditor's Report in accordance with Rule 11 of the Companies (Audit & Auditors) Rule, 2014, in our opinion and to the best of our information and according to the explanation given to us :
- (i) The Company has disclosed the impact of pending litigations on its financial position in its financial statements. Refer note 25 to the financial statements.
- (ii) The Company did not have any long term contracts and there were no losses on the derivative contracts. Refer Note 41A to the financial statements.
- (iii) There has been no delays in transferring amounts were no amounts which were required to be transferred to the Investor Education and Protection Fund by the Company.
- (2) As required by the Companies (Auditor's Report) Order, 2016 ("the Order") issued by the Central Government in terms of Section 143(11) of the Act, we give in "Annexure B" a statement on the matters specified in paragraphs 3 and 4 of the Order.

For **Deloitte Haskins & Sells**  
*Chartered Accountants*  
(Firm's Registration No.: 008072S)

**Geetha Suryanarayanan**  
*Partner*

Chennai, May 4, 2016

(Membership No.: 29519)

# Annexure "A" to the Independent Auditor's Report

(Referred to in paragraph (f) under 'Report on Other Legal and Regulatory Requirements' of our report of even date)

Report on the Internal Financial Controls Over Financial Reporting under Clause (i) of Sub-section 3 of Section 143 of the Companies Act, 2013 ("the Act")

We have audited the internal financial controls over financial reporting of Carborundum Universal Limited ("the Company") as of March 31, 2016 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

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". 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 Companies Act, 2013.

## Auditor's Responsibility

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 Institute of Chartered Accountants of India and the Standards on Auditing prescribed under Section 143(10) of the Companies Act, 2013, to the extent applicable to an audit of internal financial controls. 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.

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 whether a risk of material weakness exists, 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.

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

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 authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized 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

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

# Annexure "A" to the Independent Auditor's Report (Continued)

because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

## Opinion

In our opinion, to the best of our information and according to the explanations given to us, 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, 2016, 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 **Deloitte Haskins & Sells**  
*Chartered Accountants*  
(Firm's Registration No.: 008072S)

**Geetha Suryanarayanan**  
*Partner*

Chennai, May 4, 2016

(Membership No.: 29519)

# Annexure "B" to the Independent Auditor's Report

(Referred to in paragraph 2 under 'Report on Other Legal and Regulatory Requirements' section of our report of even date)

- (i) In respect of Fixed assets :
  - (a) The company has maintained proper records showing full particulars, including quantitative details and situation of fixed assets.
  - (b) The fixed assets were physically verified during the year by the Management in accordance with a regular programme of verification which, in our opinion, provides for physical verification of all the fixed assets at reasonable intervals. According to the information and explanation given to us, no material discrepancies were 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 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 and disclosed as fixed asset in the financial statements, the lease agreements are in the name of the Company, where the Company is the lessee in the agreement.
- (ii) In respect of inventories, physical verification was carried out by the management at reasonable intervals and no material discrepancies were noticed on such verification.
- (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 Companies Act, 2013.
- (iv) In our opinion and according to the information and explanations given to us, the Company has complied with the provisions of Sections 185 and 186 of the Companies Act, 2013 in respect of making investments and providing guarantees.
- (v) According to the information and explanations given to us, the Company has not accepted any deposit during the year. There were no unclaimed deposits at any time during the year.
- (vi) We have broadly reviewed the cost records maintained by the Company pursuant to the Companies (Cost Records and Audit) Rules, 2014, as amended prescribed by the Central Government under sub-section (1) of Section 148 of the Companies Act, 2013, and are of the opinion that, prima facie, the prescribed cost records have been made and maintained. We have, however, not made a detailed examination of the cost records with a view to determine whether they are accurate or complete.
- (vii) According to the information and explanations given to us in respect of statutory dues:
  - (a) The Company has been generally regular in depositing undisputed statutory dues including provident fund, employees' state insurance, income tax, sales tax, service tax, value added tax, duty of customs, duty of excise, cess and other material statutory dues applicable to it with the appropriate authorities.
  - (b) There were no undisputed amounts payable by the Company, in respect of Provident Fund, Employees' State Insurance, Income-tax, Sales Tax, Service Tax, Customs Duty, Excise Duty, Value Added Tax, cess and other material statutory dues in arrears as at March 31, 2016 for a period of more than six months from the date they became payable.

# Annexure "B" to the Independent Auditor's Report (Continued)

(c) Details of Sales Tax, Service Tax and Excise Duty which have not been deposited as on March 31, 2016 on account of disputes are given below:

Name of Statute	Nature of dues	Forum where dispute is pending	Period to which the Amount Relates	Amount involved (₹ in Mio)	Amount unpaid (₹ in Mio)
Central Sales Tax Act, 1956 Local Sales Tax Laws of various states	Sales Tax	Commissioner of Sales Tax (Appeals)	2003-2004 2005 to 2009 2010 to 2014	31.73	22.32
		Sales Tax Appellate Tribunal	1995-1996 2001 to 2003	2.20	0.14
		Madras High Court	1989-1990	0.47	0.47
Central Excise Act, 1944	Excise Duty	Commissioner of Central Excise (Appeals)	2009-2010 2011-2012	0.16	0.16
		Kerala High Court	1986-1987	0.95	0.95
		The Customs, Excise & Service Tax Appellate Tribunal	1991-1992 1993-1994 1995-1996 1998 to 2003	2.80	1.66
Service Tax Act, 1994	Service Tax	Commissioner of Central Excise (Appeals)	2010-2011	0.03	0.01
		The Customs, Excise & Service Tax Appellate Tribunal	2004 to 2008	2.86	2.31

(viii) In our opinion and according to the information and explanations given to us, the Company has not defaulted in the repayment of loans or borrowings to financial institutions and banks. The company has not issued any debentures.

(ix) The Company has not raised moneys by way of initial public offer or further public offer (including debt instruments) or term loans and hence reporting under clause (ix) of the CARO 2016 is not applicable.

(x) To the best of our knowledge and according to the information and explanations given to us, no fraud by the Company and no fraud on the Company by its officers or employees has been noticed or reported during the year.

(xi) In our opinion and according to the information and explanations given to us, the Company has paid/provided managerial remuneration in accordance with the requisite approvals mandated by the provisions of Section 197 read with Schedule V to the Companies Act, 2013.

(xii) The Company is not a Nidhi Company and hence reporting under clause (xii) of the CARO 2016 Order is not applicable.

(xiii) In our opinion and according to the information and explanations given to us the Company is in compliance

with Section 188 and 177 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 etc. as required by the applicable accounting standards.

(xiv) During the year the Company has not made any preferential allotment or private placement of shares or fully or partly convertible debentures and hence reporting under clause (xiv) of CARO 2016 is not applicable to the Company.

(xv) In our opinion and according to the information and explanations given to us, during the year the Company has not entered into any non-cash transactions with its directors or persons connected with him and hence provisions of Section 192 of the Companies Act, 2013 are not applicable.

(xvi) The Company is not required to be registered under Section 45-I of the Reserve Bank of India Act, 1934.

For Deloitte Haskins & Sells

Chartered Accountants

(Firm's Registration No.: 008072S)

Geetha Suryanarayanan

Partner

(Membership No.: 29519)

Chennai, May 4, 2016

# Balance Sheet

As at March 31, 2016

Particulars	Note	₹ million	
		As at 31.03.2016	As at 31.03.2015
<b>EQUITY AND LIABILITIES</b>			
<b>Shareholders' Funds</b>			
Share Capital	3	188.38	188.18
Reserves and Surplus	4	9281.71	8410.72
		<b>9470.09</b>	<b>8598.90</b>
<b>Non current liabilities</b>			
Long-term Borrowings	5	259.46	512.21
Deferred tax liabilities (Net)	6	378.82	412.51
Long term Provisions	7	43.58	44.87
		<b>681.86</b>	<b>969.59</b>
<b>Current liabilities</b>			
Short-term Borrowings	8	325.51	316.19
Trade payables			
a. Total outstanding dues of micro and small enterprises	9a	14.57	21.49
b. Total outstanding dues of enterprises other than micro and small enterprises	9b	1018.46	912.20
Other current liabilities	10	1054.30	501.83
Short- term provisions	11	24.90	135.70
		<b>2437.74</b>	<b>1887.41</b>
<b>Total</b>		<b>12589.69</b>	<b>11455.90</b>
<b>ASSETS</b>			
<b>Non current assets</b>			
Fixed assets			
Tangible assets	12	3734.57	3817.15
Intangible assets	12	98.96	76.15
Capital work-in-progress		681.60	176.39
Non-current investments	13	2446.36	2375.00
Long-term loans and advances	14	303.12	184.78
		<b>7264.61</b>	<b>6629.47</b>
<b>Current assets</b>			
Inventories	15	2252.37	2084.23
Trade receivables	16	2532.14	2242.85
Cash and Bank balances	17	98.50	66.63
Short-term loans and advances	18	442.07	432.72
		<b>5325.08</b>	<b>4826.43</b>
<b>Total</b>		<b>12589.69</b>	<b>11455.90</b>

See accompanying notes forming part of the financial statements

In terms of our report attached

For **Deloitte Haskins & Sells**  
Chartered Accountants

**Geetha Suryanarayanan**  
Partner

Chennai  
May 4, 2016

On behalf of the Board

**M M Murugappan**  
Chairman

**Sridharan Rangarajan**  
Chief Financial Officer

**K Srinivasan**  
Managing Director

**Rekha Surendhiran**  
Company Secretary

# Statement of Profit and Loss

For the year ended March 31, 2016

Particulars	Note	₹ million	
		2015-16	2014-15
Revenue from operations (gross)	19	14016.26	12679.47
Less : Excise duty		1023.48	992.63
<b>Revenue from operations (net)</b>		<b>12992.78</b>	<b>11686.84</b>
<b>Expenses:</b>			
Cost of materials consumed		4886.08	4528.36
Purchases of stock-in-trade		761.13	621.22
Changes in inventories of finished goods, work-in-process and stock-in-trade	20	(69.64)	(161.38)
Employee benefits expense	21	1414.47	1295.88
Other expenses	22	4016.05	3912.26
<b>Total</b>		<b>11008.09</b>	<b>10196.34</b>
<b>Earnings before exceptional items, interest, tax, depreciation and amortisation (EBITDA)</b>		<b>1984.69</b>	<b>1490.50</b>
Finance costs	23	89.04	86.98
Depreciation and amortization expense	12	621.60	588.33
Other Income	24	399.24	309.61
<b>Profit before exceptional items and tax</b>		<b>1673.29</b>	<b>1124.80</b>
Exceptional Items :			
- Profit on sale of Land & Buildings	43	-	869.20
<b>Profit before tax</b>		<b>1673.29</b>	<b>1994.00</b>
<b>Tax expense:</b>			
- Current tax		544.20	561.00
- Deferred tax	6	(33.69)	(50.30)
<b>Profit for the year</b>		<b>1162.78</b>	<b>1483.30</b>
<b>Earnings per equity share ( of ₹1 each )</b>	39		
- Basic		6.18	7.89
- Diluted		6.16	7.87

See accompanying notes forming part of the financial statements

In terms of our report attached

For **Deloitte Haskins & Sells**  
Chartered Accountants

**Geetha Suryanarayanan**  
Partner

Chennai  
May 4, 2016

On behalf of the Board

**M M Murugappan**  
Chairman

**Sridharan Rangarajan**  
Chief Financial Officer

**K Srinivasan**  
Managing Director

**Rekha Surendhiran**  
Company Secretary



# Cash Flow Statement

## For the year ended March 31, 2016

	₹ million	
Particulars	2015-16	2014-15
<b>A. Cash flow from operating activities</b>		
Net profit before tax	<b>1673.29</b>	<b>1994.00</b>
Depreciation and amortization expenses	621.60	588.33
Finance Costs	89.04	86.98
Profit on sale of Land & Building - Exceptional item	-	(869.20)
Loss on sale of fixed assets (net)	8.78	6.84
Provision for doubtful receivables and advances	19.49	61.69
Interest and dividend income	(349.62)	(262.80)
Excess provision of earlier years reversed	(32.59)	(41.66)
Unrealised exchange (gain)/loss-net	38.71	(10.08)
	395.41	(439.90)
<b>Operating profit before working capital changes</b>	<b>2068.70</b>	<b>1554.10</b>
Changes in working capital:		
Adjustments for (increase)/decrease in operating assets/liabilities:		
- Inventories	(167.43)	(222.88)
- Long term loans & advances	(18.80)	(23.98)
- Trade receivables	(354.20)	11.09
- Short term loans & advances	(55.53)	38.58
- Trade payables	257.90	27.58
- Other Current liabilities & Provision	18.87	45.17
	(319.19)	(124.44)
Cash generated from operations	1749.51	1429.66
Direct taxes paid	(514.00)	(374.10)
<b>Net cash flow from operating activities (A)</b>	<b>1235.51</b>	<b>1055.56</b>
<b>B. Cash flow from investing activities</b>		
Purchase of tangible fixed assets *	(996.82)	(385.84)
Purchase of intangible assets *	(33.88)	(10.61)
Proceeds from sale of fixed assets	2.37	876.04
Intercompany deposit	-	(8.50)
Purchase of long term investments		
- Subsidiaries	(205.99)	(1,068.82)
Dividends received		
- Subsidiaries	280.56	175.70
- Joint ventures	63.55	75.57
- Others	1.11	1.80
Interest received	4.39	9.23
	(884.71)	(335.43)
Direct tax paid on capital gains	-	(196.90)
<b>Net cash (used in) investing activities (B)</b>	<b>(884.71)</b>	<b>(532.33)</b>
<b>*including movement of capital work in progress and advances and liability adjustment on fixed asset vendor</b>		
<b>C. Cash flow from financing activities</b>		
Proceeds from issue of equity shares including premium	24.63	47.39
Proceeds from Long term borrowings	246.11	4.02
Proceeds/(Repayment) from other borrowings (net)	(110.09)	(293.91)
Interest paid	(89.39)	(86.65)
Paid to Investor Education and Protection Fund	(0.80)	(0.67)
Dividend paid	(372.97)	(233.58)
Tax on Dividend	(19.56)	(10.29)
<b>Net cash (used in) financing activities (C)</b>	<b>(322.07)</b>	<b>(573.69)</b>
<b>Net increase/(decrease) in cash and cash equivalents(A+B+C)</b>	<b>28.73</b>	<b>(50.46)</b>
Cash and cash equivalents opening balance	55.47	105.93
Add : Due to merger of Cellaris Refractories India Limited	0.23	-
Cash and cash equivalents closing balance	84.43	55.47
<b>Net (decrease)/increase in cash and cash equivalents</b>	<b>28.73</b>	<b>(50.46)</b>
<b>Reconciliation of cash and cash equivalents with the Balance sheet</b>		
Cash and Bank balances as per balance sheet	98.50	66.63
Less : Bank balances not considered as Cash and Cash equivalents - earmarked accounts	(14.07)	(11.16)
	<b>84.43</b>	<b>55.47</b>
<b>Disclosure of non-cash transactions</b>		
<b>Particulars</b>		
<b>Relating to merger of Cellaris Refractories Limited (Refer note no: 30)</b>		
- Fixed assets	166.90	
- Inventories	0.71	
- Other assets	0.93	
- Inter Corporate loan	(44.20)	
- Other payables	(19.30)	

See accompanying notes forming part of the financial statements

In terms of our report attached

On behalf of the Board

For **Deloitte Haskins & Sells**  
Chartered Accountants

**Geetha Suryanarayanan**  
Partner

Chennai  
May 4, 2016

**M M Murugappan**  
Chairman

**Sridharan Rangarajan**  
Chief Financial Officer

**K Srinivasan**  
Managing Director

**Rekha Surendhiran**  
Company Secretary

# Notes forming part of the Standalone Financial Statements for the year ended March 31, 2016

## 1. Corporate Information

Carborundum Universal Limited (CUMI) was incorporated as a Public Limited Company in 1954 and the shares of the Company are listed in National and Bombay Stock Exchanges in India. CUMI manufactures and sells mainly Abrasives, Ceramics (Industrial Ceramics, Refractories) and Electrominerals.

## 2. Significant accounting policies :

### 2.1 Basis of accounting and preparation of financial statements

The financial statements of the Company have been prepared in accordance with the Generally Accepted Accounting Principles in India (Indian GAAP) to comply with the Accounting Standards specified under Section 133 of the Companies Act, 2013, read with Rule 7 of the Companies (Accounts) Rules, 2014 and the relevant provisions of the Companies Act, 2013 ("the 2013 Act"). The financial statements have been prepared on accrual basis under the historical cost convention. The accounting policies adopted in the preparation of the financial statements are consistent with those followed in the previous year.

### 2.2 Use of estimates

The preparation of the financial statements in conformity with Indian GAAP requires the Management to make estimates and assumptions considered in the reported amounts of assets and liabilities (including contingent liabilities) and the reported income and expenses during the year. The Management believes that the estimates used in preparation of the financial statements are prudent and reasonable. Future results could differ due to these estimates and the differences between the actual results and the estimates are recognised in the periods in which the results are known/materialise.

### 2.3 Inventories

Inventories are valued at lower of cost and net realizable value. Cost includes freight, taxes and duties net of CENVAT/VAT credit wherever applicable. Customs duty payable on material in bond is added to the cost.

In respect of raw materials, stores and spare parts, cost is determined on weighted average basis. In respect of Work in Process and Finished goods, cost includes all direct costs and applicable production overheads, to bring the goods to the present location and condition.

### 2.4 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.

### 2.5 Cash flow statement

Cash flows are reported using the indirect method, whereby profit/(loss) before extraordinary items and 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.

### 2.6 Depreciation and amortisation

Depreciable amount for assets is the cost of an asset, or other amount substituted for cost, less its estimated residual value. Depreciation on tangible fixed assets has been provided on the straight-line method as per the useful life prescribed in Schedule II to the Companies Act, 2013 except in respect of the following categories of assets, in whose case the life of the assets has been assessed as under based on technical advice, taking into account the nature of the asset, the estimated usage of the asset, the operating conditions of the asset, past history of replacement, anticipated technological changes, manufacturers warranties and maintenance support, etc.:

- leased vehicles are depreciated over four years;
- Building and other assets on lease hold land are depreciated over the lease period;
- Individual assets costing less than ₹5,000 are depreciated in full in the year of acquisition.

The difference between the depreciation for the year on the revalued assets and the depreciation calculated on the original cost is transferred directly to the General Reserve from the Fixed Assets Revaluation Reserve.

Depreciation on additions to fixed assets is provided on a pro-rata basis from the date of commissioning of the individual asset.

Premium on Lease hold Land is amortised over the tenure of the lease.

# Notes forming part of the Standalone Financial Statements for the year ended March 31, 2016 (Continued)

Intangible assets are amortised over their estimated useful life upto a maximum of 5 years on a straight line basis. The estimated useful life of the intangible assets and the amortisation period are reviewed at the end of each financial year and the amortisation period is revised to reflect the changed pattern, if any.

## 2.7 Revenue recognition

### Sale of goods:

Sales are accounted on transfer of significant risks and rewards of ownership to the buyer which generally coincides with despatch of products to customers in case of domestic sales and on the basis of bill of lading in the case of export sales. Sales are accounted net of Sales Tax/VAT, Discounts and Returns as applicable.

### Income from Contracts

The revenues from divisible contracts are recognized on the percentage completion method in respect of service contracts and in respect of supplies on despatch. In respect of indivisible contracts, the revenues are recognized on a percentage completion method, synchronized to the billing schedules agreed by the customers.

## 2.8 Other income

Interest income is accounted on accrual basis. Dividend income is accounted for when the right to receive is established.

## 2.9 Fixed Assets (Tangible/Intangible)

Fixed assets are stated at historical cost except land and buildings added up to 31<sup>st</sup> August 1984 which are shown as per the revaluation done in that year, less accumulated depreciation/amortisation.

Cost comprises of direct cost, related taxes, duties, freight and attributable finance costs (Refer 2.15 below) till such assets are ready for its intended use and net of CENVAT/VAT wherever applicable. Subsidy received from Government towards specific assets is reduced from the cost of fixed assets. Fixed assets taken on finance lease are capitalised.

Machinery spares used in connection with a particular item of fixed asset and the use of which is irregular, are capitalized at cost net of CENVAT/VAT, as applicable.

Expenditure directly relating to new projects prior to commencement of commercial production is capitalised. Indirect expenditure (net of income) attributable to the new projects or which are incidental thereto are also capitalised.

Fixed assets retired from active use and held for sale are stated at the lower of their net book value and net realisable value and are disclosed separately.

### Capital work-in-progress:

Projects under which fixed assets are not yet ready for their intended use are carried at cost, comprising direct cost, related incidental expenses and attributable interest.

## 2.10 Foreign currency transactions and translations

Foreign currency transactions are recorded at the rates of exchange prevailing on the date of the transactions. Monetary assets & 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.

Premium/discount on forward exchange contracts, which are not intended for trading or speculation purposes, 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 Notes 2.24 and 2.25 for accounting for forward exchange contracts relating to firm commitments and highly probable forecast transactions.

## 2.11 Government grants, subsidies and export incentives

Lump-sum capital subsidies, not relating to any specific fixed asset, received from Governments for setting up new projects are accounted as capital reserve.

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.

## 2.12 Investments

Long-term investments are carried individually at cost less provision for diminution, other than temporary, in the

# Notes forming part of the Standalone Financial Statements for the year ended March 31, 2016 (Continued)

value of such investments. Current investments are carried individually, at the lower of cost and fair value. Cost of investments include acquisition charges such as brokerage, fees and duties.

## 2.13 Employee benefits

Employee benefits include provident fund, superannuation fund, employee state insurance scheme, gratuity fund, compensated absences, long service awards and post-employment medical benefits.

### a. Defined contribution plan

Fixed contributions to the Superannuation Fund which is administered by Company nominated trustees and managed by Life Insurance Corporation of India and to Employee State Insurance Corporation [ESI] are charged to the Statement of profit and loss, based on the amount of contribution required to be made and when services are rendered by the employees.

Company also contributes to a government administered Pension fund on behalf of its employees, which are charged to the Statement of profit and loss.

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.

### b. Defined benefit plan

The liability for Gratuity to employees as at the Balance Sheet date is determined on the basis of actuarial valuation using Projected Unit Credit method. The liability is funded to a Gratuity fund administered by the trustees and managed by Life Insurance Corporation of India and SBI Life Insurance Company Limited. The liability there of paid/payable is absorbed in the accounts. The actuarial gains/losses are recognised in the Statement of Profit and Loss.

### c. Long term compensated absences

In respect of long term portion of compensated absences [Leave benefits], the liability is determined on the basis of actuarial valuation and is provided for.

### d. Short term employee benefits

Short term employee benefits including accumulated compensated absences determined as per Company's policy/scheme are recognized as expense based on expected obligation on undiscounted basis.

### e. Voluntary retirement compensation

Compensation to employees who have retired under voluntary retirement scheme is charged off to revenue.

## 2.14 Employee share based payments

The Company has formulated Employee Stock Option Schemes (ESOP) in accordance with the SEBI (Employee Stock Option Scheme and Employee Stock Purchase Scheme) Guidelines, 1999. The Schemes provide for grant of options to employees of the Company and its subsidiaries to acquire equity shares of the Company that vest in a graded manner and that are to be exercised within a specified period. In accordance with the SEBI Guidelines; the excess, if any, of the closing market price on the day prior to the grant of the options under ESOP over the exercise price is amortised on a straight-line basis over the vesting period.

## 2.15 Borrowing costs

Borrowing costs include interest, amortisation of ancillary costs incurred and exchange differences arising from foreign currency borrowings to the extent they are regarded as an adjustment to the interest cost. Costs in connection with the borrowing of funds to the extent not directly related to the acquisition of qualifying assets are charged to the Statement of Profit and Loss over the tenure of the loan. Borrowing costs, allocated to and utilised for qualifying assets, pertaining to the period from commencement of activities relating to construction/development of the qualifying asset upto the date of capitalisation of such asset is added to the cost of the assets. Capitalisation of borrowing costs is suspended and charged to the Statement of Profit and Loss during extended periods when active development activity on the qualifying assets is interrupted.

## 2.16 Segment reporting

The accounting policies adopted for segment reporting are in line with the accounting policies of the Company with the following additional policies :

- a. Inter-segment revenue is accounted on the basis of transactions which are primarily determined based on market/fair value factors

# Notes forming part of the Standalone Financial Statements for the year ended March 31, 2016 (Continued)

b. 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 “Unallocated Corporate Expenses”.

## 2.17 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.

## 2.18 Earnings per share

Basic earnings per share is computed by dividing the profit/(loss) after tax (including the post tax effect of extraordinary items, if any) 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 (including the post tax effect of extraordinary items, if any) 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.

## 2.19 CENVAT/Service Tax/VAT

CENVAT/VAT credit on materials purchased/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. CENVAT/VAT credit on purchase of capital items wherever applicable are taken into account as and when the assets are acquired. The CENVAT credits so taken are utilised for payment of excise duty on goods manufactured/Service tax on Output services. The unutilised CENVAT/VAT credit is carried forward in the books.

## 2.20 Taxes on income

Current tax is determined on income for the year chargeable to tax in accordance with the Income Tax Act, 1961 and other applicable tax laws.

Deferred tax is recognised for all the timing differences and is measured using the tax rates and the tax laws enacted or substantively enacted at the reporting date. Deferred Tax assets in respect of unabsorbed depreciation and carry forward of losses are recognized if there is virtual certainty that there will be sufficient future taxable income available to realize such losses. Other deferred tax assets are recognized if there is reasonable certainty that there will be sufficient future taxable income available to realise such assets.

Current and deferred tax relating to items directly recognised in reserves are recognised in reserves and not in the Statement of Profit and Loss.

## 2.21 Research and development expenses

All revenue expenditure related to research and development are charged to the respective heads in 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.

## 2.22 Impairment of assets

The carrying values of assets/cash generating units at each balance sheet date are reviewed for impairment if any indication of impairment exists. The following intangible assets are tested for impairment each financial year even if there is no indication that the asset is impaired: (a) an intangible asset that is not yet available for use; and (b) an intangible asset that is amortised over a period exceeding ten years from the date when the asset is available for use. If the carrying amount of the assets exceed the estimated recoverable amount, an impairment is recognised for such excess amount. The impairment loss is recognised as an expense in the Statement of Profit and Loss, unless the asset

# Notes forming part of the Standalone Financial Statements for the year ended March 31, 2016 (Continued)

is carried at revalued amount, in which case any impairment loss of the revalued asset is treated as a revaluation decrease to the extent a revaluation reserve is available for that asset.

The recoverable amount is the greater of the net selling price and their value in use. Value in use is arrived at by discounting the future cash flows to their present value based on an appropriate discount factor.

When there is indication that an impairment loss recognised for an asset (other than a revalued asset) in earlier accounting periods no longer exists or may have decreased, such reversal of impairment loss is recognised in the Statement of Profit and Loss, to the extent the amount was previously charged to the Statement of Profit and Loss. In case of revalued assets such reversal is not recognised.

## 2.23 Provisions and contingencies

Provisions are recognised only when there is a present obligation as a result of past events and when a reliable estimate of the amount of obligation can be made. 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.

## 2.24 Hedge accounting

The Company uses foreign currency forward contracts to hedge its risks associated with foreign currency fluctuations relating to highly probable forecast transactions. The Company designates such forward contracts in a cash flow hedging relationship by applying the hedge accounting principles set out in "Accounting Standard 30 Financial Instruments: Recognition and Measurement". These forward contracts are stated at fair value at each reporting date. Changes in the fair value of these forward contracts that are designated and effective as hedges of future cash flows are recognised directly in "Hedging reserve account" under Reserves and surplus, net of applicable deferred income

taxes and the ineffective portion is recognised immediately in the Statement of Profit and Loss.

Amounts accumulated in the "Hedging reserve account" are reclassified to the Statement of Profit and Loss in the same periods during which the forecasted transaction affects profit and loss. Hedge accounting is discontinued when the hedging instrument expires or is sold, terminated, or exercised, or no longer qualifies for hedge accounting. For forecasted transactions, any cumulative gain or loss on the hedging instrument recognised in "Hedging reserve account" is retained until the forecasted transaction occurs. If the forecasted transaction is no longer expected to occur, the net cumulative gain or loss recognised in "Hedging reserve account" is immediately transferred to the Statement of Profit and Loss.

## 2.25 Derivative contracts

The Company enters into derivative contracts in the nature of foreign currency swaps, currency options, forward contracts with an intention to hedge its existing assets and liabilities, firm commitments and highly probable transactions.

Derivative contracts which are closely linked to the existing assets and liabilities are accounted as per the policy stated for Foreign Currency Transactions and Translations. Derivative contracts designated as a hedging instrument for highly probable forecast transactions are accounted as per the policy stated for Hedge Accounting.

## 2.26 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.

## 2.27 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.

# Notes forming part of the Standalone Financial Statements for the year ended March 31, 2016 (Continued)

₹ million

## 3. Share Capital

Particulars	As at 31.03.2016	As at 31.03.2015
<b>Authorised</b>		
387,250,000 equity shares of ₹1 each (Previous year 250,000,000 equity shares of ₹1 each) : Refer note no: 30	387.25	250.00
<b>Issued, Subscribed and Paid-up</b>		
188,379,560 equity shares of ₹1 each fully paid (Previous year 188,179,042 equity shares of ₹1 each fully paid)	<b>188.38</b>	<b>188.18</b>

### 3. a) Reconciliation of the shares outstanding at the beginning and at the end of the reporting period

Particulars	As at 31.03.2016		As at 31.03.2015	
	No. of Shares	Value of Shares	No. of Shares	Value of Shares
Equity shares with voting rights				
Number of shares at the beginning of the year	188179042	188.18	187756218	187.76
Add : Shares issued against ESOP scheme	200518	0.20	422824	0.42
Total number of shares outstanding at the end of the year	188379560	188.38	188179042	188.18

### 3. 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.

An interim dividend of ₹1.00 per share & ₹0.50 were declared at the meetings of the Board of Directors held on February 5, 2016 & March 11, 2016 respectively and the same has been paid (previous year ₹0.75 per share).

Final dividend of ₹0.50 per share proposed for previous year ended March 31, 2015 has been paid during the year.

### 3. c) Details of shares held by shareholders holding more than 5% of the aggregate shares in the Company

Name of Shareholder	As at 31.03.2016		As at 31.03.2015	
	No. of Shares held	% of holding	No. of Shares held	% of holding
Murugappa Holdings Limited	55432284	29.43%	55432284	29.46%
Nalanda India Fund Limited	16793362	8.91%	16793362	8.92%
HDFC Trustee Company Ltd - a/c HDFC Mid-Cap Opportunities fund	9973000	5.29%	9068000	4.82%

# Notes forming part of the Standalone Financial Statements for the year ended March 31, 2016 (Continued)

## 4. Reserves and Surplus

				₹ million
Particulars	As at 31.03.2015	Additions	Deductions/ Adjustments	As at 31.03.2016
<b>Capital Reserve</b>				
Fixed assets revaluation reserve	23.74	-	0.68 <sup>(a)</sup>	23.06
Capital subsidy	3.00	-	-	3.00
Profit on forfeiture of shares/warrants	6.03	-	-	6.03
Capital redemption reserve	27.68	-	-	27.68
Securities Premium	142.18	24.43 <sup>(b)</sup>	-	166.61
<b>Other Reserves</b>				
General reserve	5201.79	500.68 <sup>(c)</sup>	29.36 <sup>(d)</sup>	5673.11
Hedging reserve	0.09	-	0.09	-
<b>Total</b>	<b>5404.51</b>	<b>525.11</b>	<b>30.13</b>	<b>5899.49</b>
<b>Surplus in Statement of Profit and Loss</b>				
Opening balance	2290.17			3006.21
Add: Profit for the current year	1483.30			1162.78
Less: Transfer to General Reserve	(500.00)			(500.00)
Less: Depreciation on transition to Schedule II of Companies Act 2013 (net of deferred tax ₹ 10.31 million)	(20.03)			-
Less: Final dividend including tax on dividend	(0.06)			<sup>(e)</sup> (0.03)
Less: Interim Dividend	(141.13)			(282.56)
Less : Dividend Tax on Interim Dividend (net of dividend tax credit)	(1.39)			<sup>(f)</sup> (4.18)
Less : Proposed Final Dividend	(94.09)			-
Less : Dividend Tax on Proposed Final Dividend	(10.56)			-
<b>Total</b>	<b>3006.21</b>			<b>3382.22</b>
<b>Grand Total</b>	<b>8410.72</b>			<b>9281.71</b>

(a) Represents ₹0.68 million transfer to General reserve.

(b) Premium of ₹24.43 million received on allotment of 200,518 equity shares under Employee Stock Option Scheme 2007.

(c) Represents ₹0.68 million transfer from revaluation reserve and ₹500 million transfer from current year profit.

(d) Represents due to merger impact of Cellaris Refractories India Limited - Refer note no: 30

(e) Represents dividend of ₹29,160 on 58,320 equity shares allotted under the ESOP Scheme 2007 to the employees, subsequent to the date of approval of the annual accounts by the Board on May 1, 2015 and before the book closure date.

(f) Dividend tax is net of dividend tax credit of ₹15.39 million, availed on the dividend received from an overseas subsidiaries - Refer Note no. 40



# Notes forming part of the Standalone Financial Statements for the year ended March 31, 2016 (Continued)

₹ million

## 5. Long-Term Borrowings

Particulars	As at 31.03.2016	As at 31.03.2015
<b>Secured :</b>		
<b>Long term maturities of finance lease obligations</b> (Refer note no: 38(d))		
- Secured against assets purchased under the arrangement	17.96	12.21
<b>Unsecured :</b>		
Term loan from bank	241.50	500.00
Term loan carries an interest of BNP Base rate ; Loan is to be repaid in July 2018. Current rate of interest is 8.9 % per annum. (Previous year @ 9.8% per annum, repayable in October 2016 - Refer note no:10 Other current liabilities )		
	<b>259.46</b>	<b>512.21</b>

## 6. Deferred tax liability (Net)

Particulars	As at 31.03.2016	As at 31.03.2015
Deferred tax asset arising out of timing difference relating to :		
Provision for doubtful receivables and advances	34.13	31.00
Voluntary retirement scheme payments	0.37	0.41
Expenses allowed on payment basis	39.90	40.22
Leased assets	1.02	1.36
	<b>75.42</b>	<b>72.99</b>
Deferred tax liability arising out of timing difference relating to :		
Depreciation	454.24	485.50
	<b>454.24</b>	<b>485.50</b>
<b>Deferred tax liability (Net)</b>	<b>378.82</b>	<b>412.51</b>
Movement during the year	(33.69)	(50.30)

## 7. Long term Provisions

Particulars	As at 31.03.2016	As at 31.03.2015
Provision for Employee benefits - Compensated absences	43.58	44.87
	<b>43.58</b>	<b>44.87</b>

## 8. Short-Term Borrowings

Particulars	As at 31.03.2016	As at 31.03.2015
<b>From Banks</b>		
<b>Secured</b>		
Cash Credit (repayable on demand)	189.53	70.12
Other Borrowings	-	126.68
(Secured by a pari-passu first charge on the current assets of the Company, both present and future and a pari-passu second charge on immovable properties, both present and future, relating to various manufacturing locations)		
<b>Unsecured</b>		
Other loans	135.98	119.39
	<b>325.51</b>	<b>316.19</b>

# Notes forming part of the Standalone Financial Statements for the year ended March 31, 2016 (Continued)

₹ million

## 9. Trade payables

Particulars	As at 31.03.2016	As at 31.03.2015
a. Total outstanding dues of micro and small enterprises	14.57	21.49
	14.57	21.49
b. Total outstanding dues of enterprises other than micro and small enterprises		
- Acceptances	-	35.52
- Other than Acceptances	1018.46	876.68
	<b>1018.46</b>	<b>912.20</b>

## 10. Other Current Liabilities

Particulars	As at 31.03.2016	As at 31.03.2015
Current maturities of term loan from bank- (Refer note no:5 for terms and interest rate)	500.00	-
Current maturities of finance lease obligations (Refer note no: 38(d))	5.83	6.97
- Secured against assets purchased under the arrangement		
Interest accrued but not due on loans	0.15	0.51
Unclaimed Dividend*	14.07	11.16
Remuneration payable to Directors	19.14	15.60
Other Liabilities		
- Statutory Liabilities	76.94	85.20
- Advance from Customers	23.54	40.37
- Deposits	29.52	28.40
- Payables for purchase of fixed assets	57.54	47.21
- Other payables	327.57	266.41
	<b>1054.30</b>	<b>501.83</b>

\* There is no amount which has fallen due as at Balance sheet date to be credited to Investor Education and Protection Fund

## 11. Short-term provisions

Particulars	As at 31.03.2016	As at 31.03.2015
Provision for Employee benefits - Compensated absences	24.90	26.22
Proposed dividend	-	94.09
Tax on Proposed dividend	-	15.39
	<b>24.90</b>	<b>135.70</b>

# Notes forming part of the Standalone Financial Statements

## for the year ended March 31, 2016 (Continued)

### 12. Fixed Assets

Particulars	Gross Block			Depreciation / Amortisation			Net Block			
	As at 01.04.2015	On account of Merger <sup>(e)</sup>	Additions/ Adjustments	Deletions/ Adjustments	As at 31.03.2016	As at 01.04.2015	On account of Merger <sup>(e)</sup> for the year	Deletions/ Adjustments	As at 31.03.2016	As at 31.03.2016
<b>Tangible Assets</b>										
Land										
- Freehold	37.69 <sup>(a)</sup>	-	0.17	-	37.86	-	-	-	-	37.86
- Leasehold	87.98	-	-	0.17	87.81	6.81	0.87	-	7.68	80.13
Buildings	1535.48 <sup>(a)</sup>	34.57	45.27	1.13	1614.19 <sup>(b)</sup>	458.71	54.41	0.37	514.09	1100.10
Plant & Equipment	6259.73 <sup>(c)</sup>	118.96	297.90	60.84	6615.75	3702.35	510.97	56.00	4166.29	2449.46
Furniture & Fixtures	120.32	0.10	11.53	5.32	126.63	80.87	12.44	5.21	88.14	38.49
Vehicles	20.60	-	3.93	7.77	16.76	11.10	1.40	3.43	9.07	7.69
Vehicles taken on lease	31.49	-	13.39	13.58	31.30	16.30	6.82	12.66	10.46	20.84
<b>Total</b>	<b>8093.29</b>	<b>153.63</b>	<b>372.19</b>	<b>88.81</b>	<b>8530.30</b>	<b>4276.14</b>	<b>586.91</b>	<b>77.67</b>	<b>4795.73</b>	<b>3734.57</b>
<b>Intangible Assets</b>										
Goodwill	0.20	-	-	-	0.20	0.20	-	-	0.20	0.00
Trade Mark	1.61	-	-	-	1.61	1.61	-	-	1.61	0.00
Software	20.88	-	3.84	-	24.72	9.04	7.39	-	16.43	8.29
Technical Knowhow	142.75	30.79	30.04	-	203.58	78.44	27.30	-	112.91	90.67
<b>Total</b>	<b>165.44</b>	<b>30.79</b>	<b>33.88</b>	<b>-</b>	<b>230.11</b>	<b>89.29</b>	<b>34.69</b>	<b>-</b>	<b>131.15</b>	<b>98.96</b>
<b>Grand total</b>	<b>8258.73</b>	<b>184.42</b>	<b>406.07<sup>(d)</sup></b>	<b>88.81</b>	<b>8760.41</b>	<b>4365.43</b>	<b>621.60</b>	<b>77.67</b>	<b>4926.88</b>	<b>3833.53</b>

(a) Land & Building includes those added upto 31<sup>st</sup> August 1984 which are stated at revalued amounts based on the valuation done in that year by an independent valuer. The value added on revaluation was ₹ 58.41 million.

(b) Includes ₹721.37 million ( upto Previous year ₹ 694.46 million) being cost of building on leasehold land.

(c) Net of subsidy received ₹0.77 million.

(d) Includes Research & Development ₹16.04 million ( Previous Year ₹13.32 million) - Refer Note no. 44(b).

(e) Addition on account of merger of Cellaris Refractories India Limited: Refer note no. 30

# Notes forming part of the Standalone Financial Statements

for the year ended March 31, 2016 (Continued)

## 12. Fixed Assets - Previous year

₹ million

Particulars	Gross Block			Depreciation/Amortisation			Net Block			
	As at 01.04.2014	Additions	Deletions	As at 31.03.2015	As at 01.04.2014	for the year	Deletions	Transfer to reserve	As at 31.03.2015	As at 31.03.2015
<b>Tangible Assets</b>										
Land										
- Freehold	37.81	-	0.12	37.69	-	-	-	-	-	37.69
- Leasehold	87.98	-	-	87.98	5.94	0.87	-	-	6.81	81.17
Buildings	1432.56	107.94	5.02	1535.48	402.80	54.31	3.36	4.96	458.71	1076.77
Plant & Equipment	6076.64	239.36	56.27	6259.73	3250.10	482.06	48.12	18.31	3702.35	2557.38
Furniture & Fixtures	118.71	6.14	4.53	120.32	61.13	16.28	3.49	6.95	80.87	39.45
Vehicles	21.00	2.99	3.39	20.60	10.29	1.79	1.10	0.12	11.10	9.50
Vehicles taken on lease	27.77	12.07	8.35	31.49	17.01	7.22	7.93	-	16.30	15.19
<b>Total</b>	<b>7802.47</b>	<b>368.50</b>	<b>77.68</b>	<b>8093.29</b>	<b>3747.27</b>	<b>562.53</b>	<b>64.00</b>	<b>30.34</b>	<b>4276.14</b>	<b>3817.15</b>
<b>Intangible Assets</b>										
Goodwill	0.20	-	-	0.20	0.20	-	-	-	0.20	-
Trade Mark	1.61	-	-	1.61	1.61	-	-	-	1.61	-
Software	16.13	4.75	-	20.88	5.39	3.65	-	-	9.04	11.84
Technical Knowhow	136.89	5.86	-	142.75	56.29	22.15	-	-	78.44	64.31
<b>Total</b>	<b>154.83</b>	<b>10.61</b>	<b>-</b>	<b>165.44</b>	<b>63.49</b>	<b>25.80</b>	<b>-</b>	<b>-</b>	<b>89.29</b>	<b>76.15</b>
<b>Grand total</b>	<b>7957.30</b>	<b>379.11</b>	<b>77.68</b>	<b>8258.73</b>	<b>3810.76</b>	<b>588.33</b>	<b>64.00</b>	<b>30.34</b>	<b>4365.43</b>	<b>3893.30</b>

# Notes forming part of the Standalone Financial Statements for the year ended March 31, 2016 (Continued)

## 13. Non-current investments ( at cost )

₹ million

Sl. No.	Description	Quantity in Nos.		Nominal Value (₹.)	Value	
		As at 31.03.2016	As at 31.03.2015		As at 31.03.2016	As at 31.03.2015
<b>I</b>	<b>Quoted (Trade)</b>					
a	Equity Shares (fully paid) : Joint Ventures Wendt (India) Ltd.	797352	797352	10	10.36	10.36
b	Equity Shares (fully paid) : Others Coromandel Engineering Co. Ltd.	3042900	3042900	10	60.43	60.43
<b>II</b>	<b>Quoted (Non-Trade)</b>					
a	Equity Shares (fully paid) : Others Grindwell Norton Ltd.	400	400	5	0.01	0.01
	Orient Abrasives Ltd. (₹ 1533 only)	10000	10000	1	0.00	0.00
	Orient Refractories Ltd. (₹ 713 only)	10000	10000	1	0.00	0.00
	EID Parry (India) Ltd.	1000	1000	1	0.01	0.01
	Cholamandalam Investment and Finance Co Ltd (₹ 2700 only)	100	100	10	0.00	0.00
	Tube Investments of India Ltd.	1000	1000	2	0.01	0.01
	Coromandel International Ltd.(₹ 330 only)	330	330	1	0.00	0.00
<b>III</b>	<b>Unquoted (Trade)</b>					
a.	Equity Shares (fully paid) : Subsidiaries Sterling Abrasives Ltd.	54000	54000	100	37.10	37.10
	Net Access India Ltd.	1600000	1600000	10	16.00	16.00
	CUMI Australia Pty Ltd., Australia	1050	1050	AUD 1	14.79	14.79
	Southern Energy Development Corpn. Ltd.	389908	389908	10	54.65	54.65
	CUMI International Ltd., Cyprus	25737407	24456573	USD 1 (a)	2195.80	1989.81
	Cellaris Refractories India Limited	-	13725000	10 (b)	-	134.63
b	Equity Shares (fully paid) : Joint ventures Murugappa Morgan Thermal Ceramics Ltd.	1430793	1430793	10	44.04	44.04
	Ciria India Ltd.	59998	59998	10	1.68	1.68
c	Equity Shares (fully paid) : Others Murugappa Management Services Ltd.	44704	44704	100	11.30	11.30
<b>IV</b>	<b>Unquoted (Non-Trade)</b>					
a	Equity Shares (fully paid) - Others Chennai Willingdon Corporate Foundation (₹ 50 only)	5	5	10 (c)	0.00	0.00
	John Oakey Mohan Ltd.	1900	1900	10	0.05	0.05
	CUMI Employees Co-operative Society/Stores				0.03	0.03
	Kerala Enviro Infrastructure Ltd.	10000	10000	10	0.10	0.10
b	Others 7 Years National Savings Certificate (₹ 2000 only)				0.00 (d)	0.00
					<b>2446.36</b>	<b>2375.00</b>
<b>I &amp; II</b>	<b>Quoted Investments</b>					
	- Cost				70.82	70.82
	- Market Value				1562.05	1497.11
<b>III &amp; IV</b>	<b>Unquoted Investments - Cost</b>				2375.54	2304.18

(a) During the year, the Company invested in 1280834 equity shares of USD 1 each at the premium of USD 1.5 per share in CUMI International limited.

(b) During the year, Cellaris Refractories India Limited the erstwhile wholly owned subsidiary of the Company was merged with the Company with effect from April 1, 2015.

(c) Shares allotted against corporate membership contribution.

(d) Deposit with the Government.

# Notes forming part of the Standalone Financial Statements for the year ended March 31, 2016 (Continued)

₹ million

## 14. Long-term loans and advances - Unsecured and considered good

Particulars	As at 31.03.2016	As at 31.03.2015
Capital advances	153.81	24.07
Disputed Sales tax , Central excise and Service tax amounts deposited under protest	14.45	14.77
Taxation (net of provisions)	42.91	61.12
Security Deposits	91.95	84.82
	<b>303.12</b>	<b>184.78</b>

## 15. Inventories (at lower of cost and net realisable value)

Particulars	As at 31.03.2016	As at 31.03.2015
Raw materials (Goods in Transit : ₹73.45 millions; Previous year - ₹74.45 millions)	746.10	661.13
Work-in-process	631.70	503.57
Stock in Trade	182.30	163.68
Finished stock	545.08	621.99
Stores and spare parts	147.19	133.86
	<b>2252.37</b>	<b>2084.23</b>
<b>Details of Inventory of Work-in-process per Business Segment :</b>		
- Abrasives	172.44	170.25
- Ceramics	213.72	124.56
- Electrominerals	245.54	208.76
	<b>631.70</b>	<b>503.57</b>

## 16. Trade receivables (Unsecured)

Particulars	As at 31.03.2016	As at 31.03.2015
<b>Outstanding over a period exceeding six months from the date they were due for payment</b>		
Considered good	72.57	83.04
Considered doubtful	72.36	65.02
	<b>144.93</b>	<b>148.06</b>
<b>Other receivables</b>		
Considered good	2459.57	2159.81
	<b>2604.50</b>	<b>2307.87</b>
Less: Provision for doubtful receivables	72.36	65.02
	<b>2532.14</b>	<b>2242.85</b>

# Notes forming part of the Standalone Financial Statements for the year ended March 31, 2016 (Continued)

₹ million

## 17. Cash and Bank balances:

Particulars	As at 31.03.2016	As at 31.03.2015
Cash on hand	0.89	0.97
Balances with banks :		
- Current account	83.54	54.50
- In earmarked accounts : Unclaimed dividend account	14.07	11.16
	<b>98.50</b>	<b>66.63</b>

## 18. Short-term loans & advances

Particulars	As at 31.03.2016	As at 31.03.2015
(Unsecured and considered good, unless otherwise stated)		
Loans and advances to employees	14.45	10.64
Prepaid expenses	22.89	21.77
Trade advances	151.75	142.25
Intercorporate deposit to related party *	-	44.20
Claims recoverable	0.02	0.04
Other Loans & Advances (#)		
Considered good	74.67	53.35
Considered doubtful	26.30	26.22
Less: Provision for doubtful advances	26.30	26.22
	<b>74.67</b>	<b>53.35</b>
<b>Balances with statutory authorities</b>		
- CENVAT credit receivable	71.47	45.05
- VAT input credit receivable	13.40	14.10
- Customs duty refunds receivable	69.43	85.60
- Service tax input credit receivable	23.99	15.72
	<b>178.29</b>	<b>160.47</b>
	<b>442.07</b>	<b>432.72</b>
* Maximum amount outstanding during the year	-	44.20
# include related party receivable	29.36	39.86

## 19. Revenue from Operations

Particulars	2015-16	2014-15
<b>Sale of Products (Refer Note no: 37 (b)Segment Disclosure for breakup of Sales)</b>	<b>13752.70</b>	<b>12435.46</b>
Income from Contracts	80.73	75.06
Other Operating Revenue		
Service Income	61.44	59.08
Scrap Sales	67.24	68.23
Miscellaneous Income		
- Export benefits	43.62	31.40
- Others	10.53	10.24
	<b>182.83</b>	<b>168.95</b>
	<b>14016.26</b>	<b>12679.47</b>
Less : Excise duty	1023.48	992.63
	<b>12992.78</b>	<b>11686.84</b>

# Notes forming part of the Standalone Financial Statements for the year ended March 31, 2016 (Continued)

₹ million

## 20. Changes in inventories of finished goods, work-in-process and stock-in-trade

Particulars	2015-16	2014-15
Opening stock		
Work-in-process	503.57	409.78
Stock in trade	163.68	165.94
Finished stock	621.99	552.14
	<b>1289.24</b>	<b>1127.86</b>
Add : Merger of Cellaris Refractories India limited (Refer note no:30)		
Work-in-process	0.18	-
Finished stock	0.02	-
	<b>0.20</b>	<b>-</b>
Less: Closing stock		
Work-in-process	631.70	503.57
Stock in trade	182.30	163.68
Finished stock	545.08	621.99
	<b>1359.08</b>	<b>1289.24</b>
<b>Accretion to stock</b>	<b>(69.64)</b>	<b>(161.38)</b>

## 21. Employee benefits expense

Particulars	2015-16	2014-15
Salaries, wages and bonus	1037.72	946.07
Contribution to provident and other funds	112.58	93.97
Voluntary retirement compensation	0.40	0.35
Remuneration to Managing Director	17.44	15.32
Welfare expenses	246.33	240.17
	<b>1414.47</b>	<b>1295.88</b>
<b>Remuneration to Managing Director includes :</b>		
Salaries & Allowances	11.12	10.52
Incentive*	4.10	3.50
Contribution to provident and other funds (excludes Gratuity and Compensated absences since employee-wise valuation is not available)	2.22	1.30
	<b>17.44</b>	<b>15.32</b>
Value of perquisites (included under appropriate heads of accounts)	<b>0.03</b>	<b>0.58</b>

\* Incentive to Managing Director is provisional and subject to determination by the Nomination and Remuneration Committee.



# Notes forming part of the Standalone Financial Statements for the year ended March 31, 2016 (Continued)

₹ million

## 22. Other expenses

Particulars	2015-16	2014-15
Consumption of stores and spares	557.40	497.77
Power and fuel (a)	1175.18	1223.88
Rent	34.53	37.10
Excise duty on stock differential (c)	(7.68)	14.87
Rates and taxes	71.90	105.08
Insurance	24.53	24.71
Repairs to: (b)		
- Buildings	26.01	18.19
- Machinery	395.95	342.39
Directors' sitting fees	1.87	1.52
Commission to non-whole-time directors	14.50	11.56
Auditors' remuneration (Refer note no. 35)	6.76	5.75
Travel and conveyance	156.97	148.82
Freight, delivery and shipping charges	358.46	349.52
Selling commission	29.97	27.52
Prompt payment discount	74.59	73.26
Advertisement and publicity	57.48	42.77
Printing, stationery and communication	45.65	45.20
Bad receivables and advances written off	1.82	6.18
Less : Provision adjusted	1.82	6.18
	-	-
Provision for doubtful receivables, advances and deposits	19.49	61.69
Professional fees	48.94	47.50
Loss on exchange fluctuation (Net)	-	15.95
Services outsourced	793.82	685.93
Loss on sale of fixed Assets	9.45	9.45
Miscellaneous expenses	120.28	121.83
	<b>4016.05</b>	<b>3912.26</b>
(a) Net of own power generation, which includes energy banked with KSEB - ₹44.82 million (previous year ₹Nil)	143.01	172.87
(b) Includes stores and spare parts	221.54	201.62
(c) Represents excise duty relating to difference between the opening and closing stock of finished goods. The excise duty shown as deduction from sales in Revenue from operations - Note no:19 represents excise duty on sales during the year		

# Notes forming part of the Standalone Financial Statements for the year ended March 31, 2016 (Continued)

₹ million

## 23. Finance Costs

Particulars	2015-16	2014-15
Interest		
-On Fixed loans	78.85	79.85
-Others	4.41	2.87
Other borrowing costs	5.78	4.26
	<b>89.04</b>	<b>86.98</b>

## 24. Other Income

Particulars	2015-16	2014-15
<b>Dividend Income from Long term Investments</b>		
Trade		
Dividend from Subsidiaries	280.56	175.70
Dividend from Joint ventures	63.55	75.57
Non-trade		
Dividend from others	0.02	0.03
<b>Dividend Income from Current Investments</b>		
Dividend from Mutual fund	1.09	1.77
<b>Interest Income</b>		
- from banks	0.00	1.03
- from inter corporate deposits	-	4.04
- from others	4.40	4.67
<b>Other Income</b>		
Profit on sale of fixed assets	0.67	2.61
Gain on exchange fluctuation (Net)	15.27	-
Provision for expenses no longer required written back	22.34	3.47
Provision for doubtful receivables/advances no longer required written back	10.25	38.20
Rental Income	1.09	2.52
	<b>399.24</b>	<b>309.61</b>
Tax deducted at source from interest	0.01	0.51

# Notes forming part of the Standalone Financial Statements for the year ended March 31, 2016 (Continued)

₹ million

## 25. Contingent Liabilities and commitments:

Particulars	As at 31.03.2016	As at 31.03.2015
<b>A. Contingent Liabilities</b>		
a. No provision is considered necessary for disputed income tax, sales tax, service tax, excise duty and customs duty demands which are under various stages of appeal proceedings as given below :		
i. Income Tax Act, 1961	121.00	127.15
ii. Central Sales Tax Act, 1956 & Local Sales Tax laws of various states	11.60	11.14
iii. Central Excise Act, 1944	3.90	5.65
iv. Service Tax, 1994	2.90	3.20
b. Outstanding letters of comfort/guarantee given on behalf of subsidiaries	2609.93	3224.66
c. Outstanding letters of credit	108.54	90.06
d. Outstanding bills discounted	38.99	7.17
e. Claims against the company not acknowledged as debts		
i. Urban Land Tax	4.20	4.20
ii. Electricity tax	3.92	-
iii. Stamp duty	1.90	1.90
iv. Claim filed by ship liner towards damages	14.00	14.00
v. Claim filed before Consumer Dispute Redressal Forum/Civil Court	1.60	1.00
vi. Mining Royalty	42.80	42.80
vii. Tamil Nadu Electricity Board	3.00	-
	71.42	63.90
f. 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>B. Commitments:</b>		
Estimated amount of contracts remaining to be executed and not provided for:		
- Towards capital account	214.54	76.57

# Notes forming part of the Standalone Financial Statements for the year ended March 31, 2016 (Continued)

26. The following pre-commissioning expenses incurred during the year on various projects have been included in Fixed Assets/Capital Work in Progress:

Particulars	₹ million	
	As at 31.03.2016	As at 31.03.2015
<u>Account Head :</u>		
Raw material Consumption	-	0.74
Consumption of Stores & Spares	0.03	0.06
Excise Duty	1.34	0.69
Power & Fuel	-	1.87
Rent	0.11	0.12
Travel & Conveyance	8.49	2.50
Freight	33.48	1.39
General Services	1.98	0.10
Repairs to Building	0.24	-
Rates & Taxes	0.28	0.13
Professional Fees	3.84	0.90
Miscellaneous Expenses	0.38	0.03
	50.17	8.53

27. Disclosures required under Section 22 of the Micro, Small and Medium Enterprises Development Act, 2006

Particulars	₹ million	
	As at 31.03.2016	As at 31.03.2015
(i) Principal amount remaining unpaid to suppliers as at the end of the accounting year (Refer note no 9 a )	14.57	21.49
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.		

# Notes forming part of the Standalone Financial Statements for the year ended March 31, 2016 (Continued)

28. The details of actuarial valuation in respect of Gratuity liability are given below:

Particulars	₹ million	
	As at 31.03.2016	As at 31.03.2015
i. Projected benefit obligation as at beginning of the year	217.14	207.17
Service cost	20.66	18.60
Interest cost	16.60	15.69
Actuarial Losses/(Gains)	5.12	(2.27)
Benefits paid	(19.30)	(22.05)
<b>Projected benefit obligation as at end of the year</b>	<b>240.22</b>	<b>217.14</b>
ii. Fair value of plan assets as at beginning of the year	200.86	165.05
Expected return on plan assets	16.76	14.64
Contributions	17.42	42.10
Benefits paid	(19.30)	(22.05)
Actuarial Gain/(losses) on plan assets	2.45	1.12
<b>Fair value of plan assets as at end of the year</b>	<b>218.19</b>	<b>200.86</b>
iii. <u>Amount recognised in the balance sheet :</u>		
Projected benefit obligation at the end of the year	240.22	217.14
Fair value of the plan assets at the end of the year	218.19	200.86
<b>(Liability)/Asset recognised in the Balance sheet - net</b>	<b>(22.03)</b>	<b>(16.28)</b>
iv. <u>Cost of the defined benefit plan for the year :</u>		
Current service cost	20.66	18.60
Interest on obligation	16.60	15.69
Expected return on plan assets	(16.76)	(14.64)
Net actuarial losses recognised in the year	2.67	(3.39)
<b>Net cost recognised in the Profit and Loss account</b>	<b>23.17</b>	<b>16.26</b>
(included in Note no 21 : Contribution to Provident and other funds)		
v. Assumptions (including long term compensated absences)		
Discount rate	8.00%	8.00%
Expected rate of return	8.00%	8.00%
Mortality table used	Indian Assured Lives Mortality (2006-08) Ultimate	

Estimates of future salary increase take account of inflation, seniority, promotion and other relevant factors, such as supply and demand in the employment market.

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.

vi. Experience Adjustment

	31-Mar-16	31-Mar-15	31-Mar-14	31-Mar-13	31-Mar-12
Present value of defined benefit obligation	240.22	217.14	207.17	168.88	163.52
Fair value of plan assets	218.19	200.86	165.05	163.52	136.95
Balance sheet (Liability)/Asset	(22.03)	(16.28)	(42.12)	(5.36)	(26.57)
P & L (Income)/expenses	23.17	16.26	42.76	5.80	29.52
Experience adjustment on plan liabilities (gain)/loss	5.12	(2.27)	24.90	(9.15)	21.06
Experience adjustment on plan assets gain/(loss)	2.45	1.12	(0.27)	1.22	0.08

# Notes forming part of the Standalone Financial Statements for the year ended March 31, 2016 (Continued)

29. a. Pursuant to the approval accorded by shareholders at their Annual General Meeting held on 27<sup>th</sup> July 2007, the Nomination and Remuneration Committee of the Company formulated 'Carborundum Universal Limited Employee Stock Option Scheme 2007' (ESOP 2007 or the Scheme).
- b. Under the Scheme, options not exceeding 4667700 have been 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, the above percentages should be read as : 40%, 30% and 30%.

- 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 Compensation and Nomination 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. 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	75.225	59.025	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	2671400	60000	24800	139600	653200	334400	73600	420000	151600
(ii) Options outstanding as on 1.4.2015	482858	-	-	5244	378650	177888	64768	334680	104933
(iii) Options granted during the year	-	-	-	-	-	-	-	-	-
(iv) Options cancelled during the year	-	-	-	-	-	-	52992	9360	6558
(v) Total options vested during the year	-	-	-	-	-	-	-	-	8284

# Notes forming part of the Standalone Financial Statements for the year ended March 31, 2016 (Continued)

Grant	I	II	III	IV	VA	VB	VI	VII	VIII
(vi) Options exercised during the year	85850	-	-	-	3000	-	-	103000	8668
(vii) Options lapsed during the year	-	-	-	-	-	-	11776	32240	11920
(viii) Options outstanding as on 31.03.2016	397008	-	-	5244	375650	177888	-	190080	77787
(viii) = (ii) + (iii) - (iv) - (vi) - (vii)									
Grant II & III fully cancelled									
(ix) Options vested but not exercised as at 01.04.2015	482858	-	-	5244	378650	177888	42688	208680	69503
(x) Options vested but not exercised as at 31.03.2016	397008	-	-	5244	375650	177888	30912	73440	57199
(x) = (ix) + (v) - (vi) - (vii)									

e. Contractual Life

The ESOP 2007 is established with effect from 29th September 2007 and shall continue to be in force until

- (i) its termination by the Board/Nomination and Remuneration Committee or
- (ii) the date on which all of the options available for issuance under the ESOP 2007 have been issued and exercised.

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

# Notes forming part of the Standalone Financial Statements for the year ended March 31, 2016 (Continued)

- g. Had the Company adopted the fair value method in respect of options granted, the total amount that would have been amortised over the vesting period is ₹211.20 million and the impact on the financial statements would be:

	Year ended 31.03.2016	Year ended 31.03.2015
Increase in employee costs - (₹ million)	1.10	8.19
Decrease in Profit after Tax - (₹ million)	0.72	5.40
Decrease in Basic & Diluted Earnings per share - ₹	0.01	0.03

- h. 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	Grant II & III	Grant V (A&B)	Grant 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%

## 30. Merger of Cellaris Refractories India Limited with the Company

- Pursuant to the "Scheme of Amalgamation" of Cellaris Refractories India limited - a wholly owned subsidiary ("Transferor company") with the Company as sanctioned by the Honourable Madras High court vide their order dated September 10, 2015, the assets and liabilities of the Transferor Company were transferred to and vested with the Company with effect from the appointed date, April 01, 2015. The effective date of merger is September 29, 2015 on which date all the relevant requirement under the Companies Act 1956 and 2013 have been complied with.
- The transferor Company is engaged in the business of manufacture and selling of high temperature insulation product for all kinds including ceramics foams.
- The amalgamation has been accounted for under the "Pooling of interest" method as prescribed by Accounting standard 14 "Accounting for Amalgamation" notified under the Companies (Accounting Standard) Rules, 2006 (as amended) . Accordingly the assets and liabilities of the transfer or company as at April 01, 2015 have been taken over at their respective book values.
- Consequent to the Scheme, the authorised equity share capital of the Company stands increased from 250,000,000 shares of ₹1 each, aggregating to ₹250 million to 387,250,000 equity shares of ₹1 each aggregating to ₹387.25 million.
- As per the scheme of amalgamation, the following amounts have been adjusted against the General reserve

Particulars	₹ million
a. Debit balance in statement of Profit and loss of the transferor company as at 31st March 2015	31.98
b. Difference between the amount recorded as investment in the books of Company and the amount of share capital of the transferor Company	2.62
<b>Total</b>	<b>29.36</b>



# Notes forming part of the Standalone Financial Statements for the year ended March 31, 2016 (Continued)

₹ million

vi Details of assets and liabilities taken over on Amalgamation.

Particulars	Balance as at 01.04.2015
<b>EQUITY AND LIABILITIES</b>	
<b>Shareholders' Funds</b>	
Share Capital	137.25
Reserves & Surplus	(31.98)
<b>Total Shareholders' funds</b>	<b>105.27</b>
<b>Current liabilities</b>	
Short term Borrowings	44.20
Trade payables	11.75
Other current liabilities	7.55
<b>Total non-current liabilities</b>	<b>63.50</b>
<b>Total</b>	<b>168.77</b>
<b>ASSETS</b>	
<b>Non-current assets</b>	
Fixed assets	166.90
<b>Total Non- current assets</b>	<b>166.90</b>
<b>Current assets</b>	
Inventories	0.71
Cash and Bank balances	0.23
Short-term loans and advances	0.93
<b>Total current assets</b>	<b>1.87</b>
<b>Total</b>	<b>168.77</b>

	31.03.2016	31.03.2015
31. Disclosure relating to Contracts:		
Contract revenue recognised during the year	80.73	75.06
Retentions	2.69	4.48
Receivables (net of retention)	25.76	15.06
32. Donations given to political parties during the year :		
Triumph Electoral Trust	-	5.29
33. a. Value of Imports on CIF basis:		
Raw materials	2208.48	1955.32
Components & Spare parts	75.18	83.91
Finished goods	491.61	355.46
Capital goods	409.05	41.58
b. Expenditure in foreign currency (on cash basis):		
Professional/Consultancy fees	60.44	22.75
Commission	9.41	4.58
Interest	1.06	2.23
Travel and other matters	47.00	47.55
34. Earnings in foreign exchange on account of :		
Value of exports on FOB basis	2675.86	2206.78
Royalty	3.33	3.18
Dividend	251.94	162.60
Management fees	20.15	18.71

# Notes forming part of the Standalone Financial Statements for the year ended March 31, 2016 (Continued)

## 35. Auditors' Remuneration

	₹ million	
	31.03.2016	31.03.2015
Statutory audit	3.20	2.95
Tax Audit	0.80	0.60
Other services	2.75	2.15
Out of pocket expenses	0.01	0.05
	<b>6.76</b>	<b>5.75</b>

## 36. Related Party Disclosures

### a 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]
Cellaris Refractories India Ltd <sup>#</sup>	[CRIL]
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 Middleeast FZE	[CME]
CUMI Canada Inc <sup>*</sup>	[CCI]
CUMI Abrasives & Ceramics Company Limited	[CACCL]
Thukela Refractories Isithebe Pty Limited	[TRIL]
CUMI Europe s.r.o	[CE]

<sup>#</sup> Merged with the company with effect from 1<sup>st</sup> April 2015 (Refer note no. 30)

<sup>\*</sup> Ceased to exist from 22<sup>nd</sup> May 2015.

#### 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]
Wendt (India) Ltd	[Wendt]

##### Key Management Personnel

Mr. K Srinivasan, Managing Director

# Notes forming part of the Standalone Financial Statements for the year ended March 31, 2016 (Continued)

## 36. b. Transactions with Related parties

₹ million

Particulars	Subsidiaries		Joint Ventures		Key Management Personnel		Total	
	2015-16	2014-15	2015-16	2014-15	2015-16	2014-15	2015-16	2014-15
1. Income from sales and services	829.98	742.68	117.93	89.47	-	-	947.91	832.15
2. Lease/Rental/Royalty income	3.33	4.05	-	-	-	-	3.33	4.05
3. Dividend income	280.56	175.70	63.55	75.57	-	-	344.11	251.27
4. Interest received	-	4.04	-	-	-	-	-	4.04
5. Purchase of goods	509.36	466.41	21.99	46.12	-	-	531.35	512.53
6. Reimbursement of employee cost	0.06	0.85	0.12	0.12	-	-	0.18	0.97
7. Purchase of power	171.32	145.44	-	-	-	-	171.32	145.44
8. Expenditure on other services	19.72	19.19	2.65	-	-	-	22.37	19.19
9. Rental expenses	-	-	1.50	1.48	-	-	1.50	1.48
10. Managerial remuneration	-	-	-	-	17.47	15.90	17.47	15.90
11. Commission Paid	2.65	-	-	-	-	-	2.65	-
12. Purchase of fixed assets	343.42	8.67	-	-	-	-	343.42	8.67
13. Investments made	205.98	1068.82	-	-	-	-	205.98	1068.82
14. Inter-corporate deposits placed	-	8.50	-	-	-	-	-	8.50
15. Trade and Other Receivables	369.03	296.78	82.12	34.76	-	-	451.15	331.54
16. Payables	87.62	110.07	6.46	2.89	-	-	94.08	112.96
17. Inter-corporate deposits outstanding	-	44.20	-	-	-	-	-	44.20
18. Deposit Outstanding	-	-	1.00	1.00	-	-	1.00	1.00
19. Letters of Comfort/Guarantee issued	2609.94	3224.66	-	-	-	-	2609.94	3224.66

# Notes forming part of the Standalone Financial Statements

## for the year ended March 31, 2016 (Continued)

36. c Details of transactions with related parties during the period ended 31<sup>st</sup> March, 2016

₹ million

Particulars	Subsidiaries					Joint Ventures					KMP Total											
	CAI	Net Access	Sterling	Sedco	CAPL	CME	CCI	Foskor	CRIL	CIL		CACCL	VAW	CUMI Europe	TRIL	Total	Wendt	MMTCL	Ciria	Total		
Income from Sales and services	235.70	1.46	89.34	-	293.93	83.73	-	13.60	-	-	65.57	45.16	1.49	-	829.98	25.40	17.11	75.42	117.93	-	947.91	
Lease rental/royalty income	-	-	-	-	3.33	-	-	-	-	-	-	-	-	-	3.33	-	-	-	-	-	-	3.33
Dividend Income	-	5.00	23.63	-	45.96	-	-	-	205.97	-	-	-	-	-	280.56	19.93	28.62	15.00	63.55	-	344.11	
Purchase of goods	0.47	-	0.63	-	-	-	-	24.70	-	-	150.03	333.53	-	-	509.36	14.51	7.48	-	21.99	-	531.35	
Reimbursement of employee cost	-	-	-	0.06	-	-	-	-	-	-	-	-	-	-	0.06	0.12	-	-	-	-	0.18	
Purchase of power	-	-	-	171.32	-	-	-	-	-	-	-	-	-	-	171.32	-	-	-	-	-	171.32	
Expenditure on other services	-	19.72	-	-	-	-	-	-	-	-	-	-	-	-	19.72	2.65	-	-	-	-	22.37	
Rental expense	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.50	-	-	-	-	1.50	
Managerial Remuneration	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	17.47	17.47
Commission Paid	-	-	-	-	-	-	-	-	-	-	-	-	2.65	-	2.65	-	-	-	-	-	-	2.65
Purchase of Fixed Assets	-	0.06	-	-	-	-	-	259.61	-	-	-	-	-	83.75	343.42	-	-	-	-	-	-	343.42
Investments made	-	-	-	-	-	-	-	-	205.98	-	-	-	-	-	205.98	-	-	-	-	-	-	205.98
Trade and other receivables	186.99	0.43	11.34	-	51.18	24.09	-	25.81	-	-	64.49	4.70	-	-	369.03	25.45	17.54	39.13	82.12	-	451.15	
Payables	0.50	0.20	-	11.00	-	-	-	-	-	-	13.56	58.55	0.26	3.55	87.62	4.77	1.69	-	6.46	-	94.08	
Deposit Outstanding	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.00	-	-	-	-	1.00	
Letter of Comfort/ Guarantee Outstanding	298.49	-	-	-	-	-	-	670.50	-	1154.14	486.81	-	-	-	2609.94	-	-	-	-	-	-	2609.94

# Notes forming part of the Standalone Financial Statements

## for the year ended March 31, 2016 (Continued)

₹ million

36. d. Details of transactions with related parties during the period ended 31<sup>st</sup> March, 2015

Particulars	Subsidiaries										Joint Ventures			KMP	Total					
	CAI	Net Access	Sterling	Sedco	CAPL	CME	CCI	Foskor	CRIL	CIL	CACCL	VAW	TRIL			Total	Wendt	MMTCL	Ciria	Total
Income from Sales and services	200.32	1.46	114.53	-	298.16	55.22	-	-	-	-	45.84	27.15	-	742.68	21.37	16.50	51.60	89.47	832.15	
Lease rental/royalty income	-	-	-	-	3.18	-	-	-	0.87	-	-	-	-	4.05	-	-	-	-	-	4.05
Dividend Income	-	5.00	8.10	-	28.40	-	-	-	134.20	-	-	-	-	175.70	19.93	34.34	21.30	75.57	251.27	
Interest received	-	-	-	-	-	-	-	-	4.04	-	-	-	-	4.04	-	-	-	-	-	4.04
Purchase of goods	-	-	0.78	-	-	-	-	34.13	-	-	177.97	246.60	6.93	466.41	25.04	21.08	-	46.12	-	512.53
Reimbursement of employee cost	-	0.16	-	0.69	-	-	-	-	-	-	-	-	-	0.85	0.12	-	-	-	0.12	0.97
Purchase of power	-	-	-	145.44	-	-	-	-	-	-	-	-	-	145.44	-	-	-	-	-	145.44
Expenditure on other services	-	19.19	-	-	-	-	-	-	-	-	-	-	-	19.19	-	-	-	-	-	19.19
Rental expense	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.48	-	-	1.48	-	1.48
Managerial Remuneration	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15.90	15.90
Purchase of Fixed Assets	-	-	-	-	-	-	-	-	-	-	-	-	8.67	8.67	-	-	-	-	-	8.67
Investments made	-	-	-	-	-	-	-	-	64.63	1004.19	-	-	-	1068.82	-	-	-	-	-	1068.82
ICD Given	-	-	-	-	-	-	-	-	8.50	-	-	-	-	8.50	-	-	-	-	-	8.50
Trade and other receivables	152.83	0.55	12.79	0.08	54.88	14.49	-	25.81	18.67	-	16.68	-	-	296.78	15.55	8.08	11.13	34.76	-	331.54
Payables	-	1.07	-	13.58	-	-	-	-	-	-	36.56	56.26	2.60	110.07	2.62	0.27	-	2.89	-	112.96
ICD Outstanding	-	-	-	-	-	-	-	-	44.20	-	-	-	-	44.20	-	-	-	-	-	44.20
Deposit Outstanding	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.00	-	-	1.00	-	1.00
Letter of Comfort/ Guarantee Outstanding	281.66	-	-	-	-	-	-	775.50	-	1527.20	536.90	-	-	103.40	3224.66	-	-	-	-	3224.66

# Notes forming part of the Standalone Financial Statements for the year ended March 31, 2016 (Continued)

## 37. (a) Segmental Reporting

### i) Business Segments

The Company has considered business segment as the primary segment for disclosure. The business segments are: abrasives, ceramics and electrominerals.

Abrasive segment comprise of bonded, coated, processed cloth, polymers, powertools and coolants. Ceramics comprise of super refractories, industrial ceramics, anti-corrosives and bioceramics. Electrominerals include abrasive/refractory grains, micro grits for the photovoltaic industry and captive power generation from hydel power plant.

The above segments have been identified taking into account the organisation structure as well as the differing risks and returns of these segments.

### ii) Geographical Segments

The geographical segments considered for disclosure are : India and Rest of the world. All the manufacturing facilities and sales offices are located in India. Sales to the rest of the world are also serviced by Indian sales offices.

Geographical revenues are segregated based on the location of the customer who is invoiced or in relation to which the revenue is otherwise recognised.

### iii) Segmental assets includes all operating assets used by respective segment and consists principally of operating cash, debtors, inventories and fixed assets, net of allowances and provisions.

Segmental liabilities include all operating liabilities and consist primarily of creditors and accrued liabilities. Segment assets and liabilities do not include income tax assets and liabilities.

37 (b) Segment Disclosure

**A. PRIMARY SEGMENT INFORMATION**

Particulars	Abrasives		Ceramics		Electrominerals		Eliminations		Total
	2015-16	2014-15	2015-16	2014-15	2015-16	2014-15	2015-16	2014-15	
<b>1. REVENUE</b>									
Gross Sales	7904.82	7330.96	3291.27	3249.38	2556.61	1855.12	-	-	13752.70
Less : Excise Duty	652.24	641.80	198.75	196.17	172.49	154.66	-	-	1023.48
<b>Net External Sales</b>	<b>7252.58</b>	<b>6689.16</b>	<b>3092.52</b>	<b>3053.21</b>	<b>2384.12</b>	<b>1700.46</b>	-	-	<b>12729.22</b>
Income from Contracts	-	-	80.73	75.06	-	-	-	-	80.73
Inter segment Sales	7.83	-	16.24	18.22	742.80	637.27	(766.87)	(655.49)	-
<b>Total Revenue</b>	<b>7260.41</b>	<b>6689.16</b>	<b>3189.49</b>	<b>3146.49</b>	<b>3126.92</b>	<b>2337.73</b>	<b>(766.87)</b>	<b>(655.49)</b>	<b>12809.95</b>
<b>2. RESULT</b>									
Segment result	941.12	678.73	398.39	362.73	335.13	202.84	-	-	1674.64
Profit on sale of fixed assets	(3.67)	(5.49)	(0.84)	(2.26)	(1.44)	(0.59)	-	-	(5.95)
(Net)									(8.34)
Unallocated corporate expenses	-	-	-	-	-	-	-	-	(255.98)
Finance costs	-	-	-	-	-	-	-	-	(89.04)
Interest and dividend income	-	-	-	-	-	-	-	-	349.62
Profit on sale of immovable property	-	-	-	-	-	-	-	-	869.20
Income taxes	-	-	-	-	-	-	-	-	(510.51)
<b>Net profit</b>	<b>937.45</b>	<b>673.24</b>	<b>397.55</b>	<b>360.47</b>	<b>333.69</b>	<b>202.25</b>	-	-	<b>1162.78</b>
<b>3. OTHER INFORMATION</b>									
Segment assets	4008.85	3893.69	3121.63	2938.92	2824.08	1990.58	-	-	9954.56
Unallocated corporate assets	-	-	-	-	-	-	-	-	2632.71
<b>Total assets</b>	<b>4008.85</b>	<b>3893.69</b>	<b>3121.63</b>	<b>2938.92</b>	<b>2824.08</b>	<b>1990.58</b>	-	-	<b>12589.69</b>
Segment liabilities	708.04	634.36	367.19	352.31	423.80	383.71	-	-	1499.03
Unallocated corporate liabilities	-	-	-	-	-	-	-	-	1620.57
<b>Total liabilities</b>	<b>708.04</b>	<b>634.36</b>	<b>367.19</b>	<b>352.31</b>	<b>423.80</b>	<b>383.71</b>	-	-	<b>3119.60</b>
Capital expenditure	120.96	72.33	336.52	161.67	566.65	151.92	-	-	-
Depreciation & Amortization	227.90	230.41	234.85	225.24	145.57	116.87	-	-	-
Non cash item other than Depreciation & amortization	0.52	2.10	18.97	32.76	0.00	1.01	-	-	-

**B. SECONDARY SEGMENT INFORMATION**

Particulars	₹ million	
	31.03.2016	31.03.2015
<b>1. Revenue by Geographical market</b>		
India	10086.28	9267.96
Rest of the world	2723.67	2249.93
<b>Total</b>	<b>12809.95</b>	<b>11517.89</b>
<b>2. Carrying amount of Segment Assets</b>		
India	9205.11	8246.81
Rest of the world	749.45	576.38
<b>Total</b>	<b>9954.56</b>	<b>8823.19</b>
<b>3. Additions to Fixed Assets and Intangible Assets</b>		
India	389.10	360.59
Rest of the world	-	-
<b>Total</b>	<b>389.10</b>	<b>360.59</b>

# Notes forming part of the Standalone Financial Statements for the year ended March 31, 2016 (Continued)

## 38. Leases

Particulars	₹ million	
	31.03.2016	31.03.2015
The Company has acquired vehicles under finance lease with respective asset as security:		
a. Cost of Leased Assets	31.30	31.49
b. Net carrying amount	20.84	15.19
c. Reconciliation between total minimum lease payments and their present value:		
Total minimum lease payments	32.50	24.32
Less: Future liability on interest account	(8.71)	(5.14)
Present value of lease payments	23.79	19.18

d. Year wise future minimum lease rental payments:	₹ million			
	Total Minimum Lease Payments as on 31.03.2016	Present value of Lease payments as on 31.03.2016	Total Minimum Lease Payments as on 31.03.2015	Present value of Lease payments as on 31.03.2015
(i) Not later than one year	9.05	5.83	9.30	6.97
(ii) Later than one year and not later than five years	23.45	17.96	15.02	12.21
(iii) Later than five years	Nil	Nil	Nil	Nil

e. The Company has taken certain premises under operating leases cancellable at mutual option. Hence no disclosure in this regard is required.

## 39. Notes to Earnings Per Share (EPS)

Particulars	₹ million	
	31.03.2016	31.03.2015
The calculation of the Basic and Diluted Earning per share is based on the following data:		
Net Profit for the year	1162.78	1483.30
Weighted average number of equity shares outstanding during the year		
- Basic	188276270	187942989
- Dilutive	188669852	188446811
Earnings per Share - Basic (₹)	6.18	7.89
Earnings per Share - Diluted (₹)	6.16	7.87

40. Dividend Tax on the second Interim Dividend (March 2016) has been paid after availing the credit amounting to ₹2.06 million (Previous year - Nil) in respect of the tax paid on the dividends received from a domestic subsidiary. Dividend Tax on the first Interim Dividend (Feb 2016) has been paid after availing the credit amounting to ₹35.89 million (Previous year - ₹26.83 million) in respect of the tax paid on the dividends received from an overseas subsidiary. Dividend tax paid on the final dividend approved during last AGM held in 2015 is Nil (previous year ₹8.91 million) after considering an amount of ₹15.39 million (previous year ₹4.83 million) relating to the dividends received from two overseas subsidiaries and ₹3.77 million (previous year ₹2.23 million) relating to dividends received from two domestic subsidiaries.

## 41. Disclosures in respect of Derivatives

A. The Company has entered into forward contracts to hedge its risks associated with foreign currency fluctuations relating to certain firm commitments and forecast transactions. The company designates them as effective cash flow hedges. The company does not use derivative financial instruments for speculative purposes.

The Company has adopted the measurement principles as laid down in the AS - 30 -Financial Instruments - Recognition and Measurement with respect to above mentioned effective cash flow hedges.



# Notes forming part of the Standalone Financial Statements for the year ended March 31, 2016 (Continued)

Pursuant to the application of the said measurement principles, the exchange differences arising on these transactions when marked to market as on 31<sup>st</sup> March 2016 aggregating to ₹ NIL (previous year ₹0.09 million) has been credited to Hedging Reserve as there were no contracts outstanding at the end of the period.

- B a) Quantum of derivatives (all of which identified as hedges) outstanding as at the end of the year (notional principal amount) on:

Types of Derivatives	Contracts booked for	Currency	31.03.2016		31.03.2015	
			Number of contracts	Value (₹ million)	Number of contracts	Value (₹ million)
Forward contract	Loan	USD	1	40.05	4	239.69
Forward contract	Export receivable	EURO	-	-	2	6.75
Forward contract	Export receivable	USD	-	-	3	9.39
Forward contract	Import payment	USD	-	-	1	3.13

- b) Details of unhedged foreign currency exposure are as under:

Currency	31.03.2016		31.03.2015	
	Exports	Imports	Exports	Imports
USD	8.84	1.75	7.40	1.28
EUR	1.82	0.25	0.84	0.26
GBP	0.09	0.04	0.12	-
AUD	-	0.01	-	-
JPY	-	7.25	-	-
SEK	-	0.35	-	-

₹ million

- c) Rupee equivalent of above unhedged exposure is given below:

	31.03.2016		31.03.2015	
	Exports	Imports	Exports	Imports
Equivalent INR	734.52	146.13	530.43	98.07

₹ million

## 42. Information on Joint Ventures as per AS 27

- (a) List of Joint Ventures as on 31<sup>st</sup> March, 2016:

Name of the Joint Venture	Country of Incorporation	Share in ownership and voting power
Murugappa Morgan Thermal Ceramics Ltd (MMTCL)	India	49.00%
Wendt (India) Ltd (Wendt)	India	39.87%
Ciria India Ltd (Ciria)	India	30.00%

# Notes forming part of the Standalone Financial Statements for the year ended March 31, 2016 (Continued)

## (b) Contingent Liabilities in respect of Joint Ventures:

					₹ million
Particulars	MMTCL	Wendt	Ciria	Total	
i) Directly incurred by the company	Nil	Nil	Nil	Nil	
( Previous year )	Nil	Nil	Nil	Nil	
ii) Share of the company in contingent liabilities which have been incurred jointly with other venturers	Nil	Nil	Nil	Nil	
( Previous year )	Nil	Nil	Nil	Nil	
iii) Share of the company in contingent liabilities incurred by Jointly controlled entity	4.93	2.37	0.69	7.99	
( Previous year )	4.14	2.37	0.65	7.16	
iv) Share of Other venturers in contingent liabilities incurred by Jointly controlled entity	5.14	3.57	1.61	10.32	
( Previous year )	4.31	3.57	1.53	9.40	

## (c) Capital commitments in respect of Joint Ventures :

					₹ million
Particulars	MMTCL	Wendt	Ciria	Total	
i) Direct capital commitments by the company	Nil	Nil	Nil	Nil	
( Previous year )	Nil	Nil	Nil	Nil	
ii) Share of the company in capital commitments which have been incurred jointly with other venturers	Nil	Nil	Nil	Nil	
( Previous year )	Nil	Nil	Nil	Nil	
iii) Share of the company in capital commitments of the Jointly controlled entity	6.27	25.30	Nil	31.57	
( Previous year )	6.64	12.75	Nil	19.40	

(d) Disclosure of Financial data as per AS 27 is based on the audited financials of the Jointly Controlled Entities.

# Notes forming part of the Standalone Financial Statements for the year ended March 31, 2016 (Continued)

(e) Share of the Company in the income and expenses of the Jointly controlled entities are given below:

Particulates	₹ million							
	MMTCL		Ciria		Wendt		Total	
	15-16	14-15	15-16	14-15	15-16	14-15	15-16	14-15
<b>i. Proportionate share of Income in Joint Ventures</b>								
I. Revenue from operations	684.74	707.46	148.16	214.59	575.75	528.79	1408.65	1450.84
Less : Excise Duty	(45.57)	(47.05)	-	-	(38.30)	(34.19)	(83.87)	(81.24)
	639.17	660.41	148.16	214.59	537.45	494.60	1324.78	1369.60
II. Other Income	24.43	27.85	4.50	4.54	8.25	7.68	37.18	40.07
<b>III. Total Revenue (I +II)</b>	<b>663.60</b>	<b>688.26</b>	<b>152.66</b>	<b>219.13</b>	<b>545.70</b>	<b>502.28</b>	<b>1361.96</b>	<b>1409.67</b>
<b>ii. Proportionate share of Expense in Joint Ventures</b>								
Cost of materials consumed	102.54	102.20	100.67	142.22	146.45	134.58	349.66	379.00
Purchase of stock in Trade	25.63	21.94	-	-	50.23	47.41	75.86	69.35
Changes in inventories of finished goods, work-in-progress and Stock-in-Trade	(5.38)	(9.76)	(7.41)	-	(1.47)	(4.33)	(14.26)	(14.09)
Employee benefits expense	89.83	81.29	12.98	12.35	91.01	79.29	193.82	172.93
Finance cost	0.03	0.03	-	0.33	0.02	0.30	0.05	0.66
Depreciation and amortization expense	34.91	33.17	2.75	2.45	34.70	33.09	72.36	68.71
Other expenses	274.35	294.31	17.03	12.84	164.86	144.73	456.24	451.88
<b>Total Expenses</b>	<b>521.91</b>	<b>523.18</b>	<b>126.02</b>	<b>170.19</b>	<b>485.80</b>	<b>435.07</b>	<b>1133.73</b>	<b>1128.44</b>

# Notes forming part of the Standalone Financial Statements for the year ended March 31, 2016 (Continued)

(f) Share of Company in the assets and liabilities of the Jointly controlled entities are given below:

₹ million

Particulates	MMTCL		Ciria		Wendt		Total	
	2015-16	2014-15	2015-16	2014-15	2015-16	2014-15	2015-16	2014-15
<b>iii. Proportionate share of Liabilities in Joint Ventures</b>								
<b>Non current liabilities</b>								
Long term Borrowings	-	-	-	-	-	-	-	-
Deferred tax liabilities (Net)	9.37	4.86	-	-	21.59	21.18	30.96	26.04
Long term provision	-	-	2.05	1.87	5.15	3.51	7.20	5.38
<b>Total Non current Liabilities</b>	<b>9.37</b>	<b>4.86</b>	<b>2.05</b>	<b>1.87</b>	<b>26.74</b>	<b>24.69</b>	<b>38.16</b>	<b>31.42</b>
<b>Current liabilities</b>								
Short term Borrowings	-	-	-	-	-	-	-	-
Trade payables	78.02	74.56	28.18	38.36	82.62	70.30	188.82	183.22
Other current liabilities	35.41	28.75	11.50	15.35	23.43	20.48	70.34	64.58
Short- term provisions	7.10	5.45	0.15	0.15	3.08	2.76	10.33	8.36
<b>Total Current Liabilities</b>	<b>120.53</b>	<b>108.76</b>	<b>39.83</b>	<b>53.86</b>	<b>109.13</b>	<b>93.54</b>	<b>269.49</b>	<b>256.16</b>
<b>Total Liabilities</b>	<b>129.90</b>	<b>113.62</b>	<b>41.88</b>	<b>55.73</b>	<b>135.87</b>	<b>118.23</b>	<b>307.65</b>	<b>287.58</b>
<b>iv. Proportionate share of Assets in Joint Ventures</b>								
<b>Non current assets</b>								
Fixed Assets	305.24	238.13	9.06	8.71	251.78	235.80	566.08	482.64
Goodwill on Consolidation	-	-	-	-	-	-	-	-
Deferred Tax Assets (net)	-	-	2.71	2.48	-	-	2.71	2.48
Non current investments	-	-	13.50	6.00	-	-	13.50	6.00
Long -term loans and advances	11.10	4.05	0.68	1.57	9.81	10.42	21.59	16.04
<b>Total Non current assets</b>	<b>316.34</b>	<b>242.18</b>	<b>25.95</b>	<b>18.76</b>	<b>261.59</b>	<b>246.22</b>	<b>603.88</b>	<b>507.16</b>
<b>Current assets</b>								
Current Investments	209.49	206.31	4.50	19.36	54.01	82.80	268.00	308.47
Inventories	73.21	65.83	7.44	0.40	81.45	74.78	162.10	141.01
Trade receivables	94.75	111.97	52.78	59.98	125.26	92.34	272.79	264.29
Cash and cash equivalents.	12.32	6.86	9.50	15.80	18.95	17.39	40.77	40.05
Short- term loans and advances	23.37	20.96	6.34	8.65	20.29	16.08	50.00	45.69
<b>Total Current assets</b>	<b>413.14</b>	<b>411.93</b>	<b>80.56</b>	<b>104.19</b>	<b>299.96</b>	<b>283.39</b>	<b>793.66</b>	<b>799.51</b>
<b>Total Assets</b>	<b>729.48</b>	<b>654.11</b>	<b>106.51</b>	<b>122.95</b>	<b>561.55</b>	<b>529.61</b>	<b>1397.54</b>	<b>1306.67</b>

# Notes forming part of the Standalone Financial Statements for the year ended March 31, 2016 (Continued)

43. During 2014-15, the Company has sold its immovable property in Chennai for a total consideration of ₹870 million. The profit arising out of the said transaction is shown as an exceptional item since it does not fall under the normal business activities of the Company.

44. Research and Development expenditure incurred during the year is given below:

a) Revenue Expenditure (disclosed under the respective heads)

₹ million		
Particulars	2015-16	2014-15
Direct Material, Supplies and Consumables	29.26	26.29
Employee Benefit Expenses	29.25	31.12
Repair & Maintenance	2.28	1.94
Other Expenses	12.93	17.05
Depreciation	8.27	8.93
<b>Total Revenue Expenditure</b>	<b>81.99</b>	<b>85.33</b>

b) Capital Expenditure (disclosed under the respective heads)

₹ million		
Particulars	2015-16	2014-15
Buildings	4.62	-
Plant & Machinery	6.90	12.66
Furniture & Fixtures	3.44	0.23
Intangibles	1.08	0.43
Total Capital Additions	16.04	13.32
Capital Work-in-Progress	1.24	3.50
<b>Total Capital Expenditure (including CWIP)</b>	<b>17.28</b>	<b>16.82</b>

45. Corporate Social Responsibility :

During the year, the Company incurred an aggregate amount of ₹23.25 million towards corporate social responsibility in compliance 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:

₹ million			
A. Expenditure incurred directly by the Company			
(a) Skill Centre Development			
Revenue	13.88	8.09	
Capital	-	0.19	8.28
(b) Local area development			0.45
		13.88	8.73
B. Expenditure incurred through Agencies			
(a) AMM Foundation	9.37	12.69	
(b) The Spastic Society of Tamil Nadu	-	0.41	13.10
Total	<b>23.25</b>	<b>21.83</b>	

46. Previous years figures have been regrouped, wherever necessary, to conform to current year's grouping. The previous year's financial's do not include the figures of Cellaris Refractories India Limited.



# The Spirit of the Murugappa Group

Integrity

Responsibility

Passion

## The five lights

The values, principles and beliefs that have always guided us and continue to show the way forward.

Respect

Quality

### Integrity

We value professional and personal integrity above all else. We achieve our goals by being honest and straightforward with all our stakeholders. We earn trust with every action, every minute of every day.

### Passion

We play to win. We have a healthy desire to stretch, to achieve personal goals and accelerate business growth. We strive constantly to improve and be energetic in everything that we do.

### Quality

We take ownership of our work. We unfailingly meet high standards of quality in both what we do and the way we do it. We take pride in excellence.

### Respect

We respect the dignity of every individual. We are open and transparent with each other. We inspire and enable people to achieve high standards and challenging goals. We provide everyone equal opportunities to progress and grow.

### Responsibility

We are responsible corporate citizens. We believe we can help make a difference to our environment and change lives for the better. We will do this in a manner that befits our size and also reflects our humility.



**murugappa**

**Be the energy**



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