

Abrasives CMP: ₹994.9

having ~55% market share

MCAP: ₹189bn

BUY

Research Desk <a>20th April 2023

WAY2WEALTH



CARBORUNDUM UNIVERSAL LIMITED

Buy Range	₹970-980
Target	₹1160-1180
Recommendation	BUY

Highlights

- BUY

 Carborundum Universal (CUMI) is one of the two large players in the Indian abrasives market. Market structure is favorable, with two players CUMI and Grindwell Norton (NR)
- CUMI's ceramics business is knowledge based requiring application engineering skills, customized designs, high degree of product reliability and durability. This creates customer lock-in and higher margins. Domestic abrasive business has pan-India distribution acting as entry barrier for new players.
- Private industrial capex appears to be getting into a whole new cycle after the pandemic hiccup—this time around armed with a new set of growth drivers.India's industrial production index (IIP) grew to 5.6% in Feb'23 from 5.2% in Jan'23, significant rise from 4.3% in Dec'22.
- CUMI products are likely to see demand from several of the Performance linked incentive (PLI) sectors announced by the Government of India.
- o In 2022 CUMI Abrasives Germany, a step down wholly owned subsidiary of CUMI completed acquisitions of AWUKO (100% for EUR 6mn) and RHODIUS (100% for ₹4.64bn). These acquisitions enable the company to expand its offering in European markets especially in Coated Abrasive products.
- The competitive advantage of the Abrasives business comes from its raw materials sourced from the Electrominerals business of the company besides other suppliers. CUMI is backward integrated to a large extent for key raw materials. It acquired the capability through acquisitions. For example, it acquired 84% stake in Volzhsky Abrasive Works (VAW) Russia in 2007. VAW is Russia's largest silicon carbide producer. VAW topline grew ~39% to ₹7.5bn in 9MFY23. The company is also into manufacturing abrasive materials, abrasive tools and moulded refractories. Neither VAW nor its products are covered by the sanctions. Silicon carbide is mostly exported to Europe. Any customer who wants to buy from the company is still legally allowed to do so.
- To get access to alumina, CUMI entered into a JV with Gujarat Mineral Development Corporation (GMDC) to set up brown-fused alumina plant in Gujarat. ~40% of raw material for the abrasives division is still being imported (largely from China).
- Ceramics business is focused on high-value-added products like Engineered Technical Ceramics. CUMI is a significant manufacturer of metallized cylinders in India for high-voltage power transmission and distribution and caters to leading customers globally like ABB, Bosch, Siemens, and Schneider Electric. The new facility at Hosur is fully operational with capacity of 1.9mn cylinders p.a. The business has drawn up a plan to be a global leader in metallized ceramics for vacuum interrupters. Towards this, capacities have been further expanded by the addition of a new continuous metallization furnace in recent years.
- Target is to increase the share of specialties Electrochemicals ((graphene, battery materials etc) to 35% from 20% used in emerging areas like Biomedicals, Composite & Coatings, Electronics, Sensors etc and related areas. Completed the acquisition of in PLUSS Advanced Technologies Pvt Ltd in Jan'22 to enhance working in providing new specialties to emerging opportunities like pharma cold chain, refrigeration & food supply chain, medical devices, buildings and HVAC which are emerging in India as well as globally.





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COMPANY BACKGROUND

Carborundum Universal (CUMI), a Murugappa Group company, is one of the largest players in the domestic market for Abrasives (39%/44.2% of CUMI FY22/9MFY23 Revenue and 34%/17% of FY22/9MFY23 EBIT), with ~25% market share. It caters to a wide range of end-user industries (auto, auto ancillaries, agri, construction). Its distribution network spans +600 primary dealers pan India (of which ~75 dealers are third-/fourthgeneration dealers). Backward integration for raw material sourcing has helped cement its leadership position. Abrasives, being consumables, are linked to domestic industrial production growth, hence we are likely to witness healthy medium-term growth trends supported by government push on promoting domestic manufacturing. Within its Industrial Ceramics business (24%/22% of FY22/9MFY23 Revenue and 35%/49% of FY22/9MFY23 EBIT), CUMI provides solutions for thermal/electrical/ wear and tear resistance and caters to leading domestic and international players. The business is largely B2B where CUMI caters to various global and domestic majors with some of the products being cocreated with customers. CUMI has been focusing on value-added products such as metallized ceramics (Metz cylinders) used for vacuum interrupters in power T&D where it has drawn up a plan to be a global leader CUMI is globally amongst the top-5 producers of zirconia. The main use of zirconia is in the production of hard ceramics, such as in dentistry, with other uses including as a protective coating on particles of titanium dioxide pigments, as a refractory material, in insulation, abrasives, and enamels. Within its Electrominerals business (40%/36% of FY22/9MFY23 Revenue and 42%/55% of FY22/9MFY23 EBIT), CUMI has high-single-digit market share in silicon carbide globally, where it is one of the most cost competitive suppliers. In addition, it offers various other minerals used across industries, and is also working on various emerging minerals/applications such as graphene/ high-purity silicon carbide. The business also supplies raw material to CUMI's abrasive and ceramic segments.

Reasons	to	Buy
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- One of the largest player in the Abrasive market with ~25% market share having +600 primary dealers pan India of which ~75 dealers are third-/fourth-generation dealers.
- Private industrial capex appears to be getting into a whole new cycle after the pandemic hiccup – this time around armed with a new set of growth drivers.
- CUMI's ceramics business is knowledge based requiring application engineering skills, customized designs, high degree of product reliability and durability. This creates customer lock-in and higher margins.
- CUMI is a significant manufacturer of metallized cylinders (an engineered ceramic) in India for high-voltage power transmission and distribution and caters to leading customers globally. The new facility at Hosur is fully operational with capacity of 1.9mn cylinders p.a. The business has drawn up a plan to be a global leader in metallized ceramics for vacuum interrupters
- CUMI targets to increase the share of Electrochemicals specialties to 35% from the current levels of 20%. For this, it has been investing in development of new specialties. It continues to pursue its focus on new and emerging areas of opportunities such as graphene, battery materials and related areas through tie-ups for technology and by commissioning pilot scale plants.
- 60% of raw material requirement sourced internally with Volzhsky Abrasive Works (VAW) revenue growth of ~39% in 9MFY23.

Important Data							
Nifty	17,619						
Sensex	59,568						
CMP	₹994.9						
Market Cap (₹)	₹189bn						
52W High/Low	₹1045/651						
Shares o/s (mn)	189.6						
Daily Vol. (3M NSE Avg.)	186,606						
BSE Code	513375						
NSE Code	CARBORUNIV						
Bloomberg Code	CU:IN						

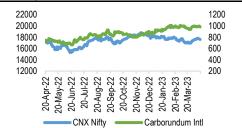
Shareholding Pattern (%)	Dec'22	
Promoter	41.9	
DIIs	28.2	
FIIs	9.1	
Public	20.8	

FINANCIALS & VALUATIONS

Particulars (`mn)	FY19	FY20	FY21	FY22
Operating Revenue	26,889	25,990	26,317	33,248
EBITDA	4,383	3,986	4,656	5,366
EBITDA Margin (%)	16.3	15.3	17.7	16.1
Net Profit	2,477	2,724	2,843	3,333
EPS (₹)	13.1	14.4	15.0	17.6
DPS (₹)	2.8	3.0	3.0	3.5
RoE (%)	14.4	14.7	13.3	14.1
RoCE (%)	17.5	17.5	17.9	18.1
P/E (x)	76.0	69.2	66.3	56.6
EV/EBITDA (x)	43.1	46.8	39.4	35.3
P/BV (x)	10.6	9.9	8.7	7.7

Particulars (`mn)	FY23E	FY24E	FY25E
Operating Revenue	47,176	53,918	62,303
EBITDA	6,381	8,834	11,179
EBITDA Margin (%)	13.5	16.4	17.9
Net Profit	528	733	825
EPS (₹)	20.5	29.2	36.6
DPS (₹)	4.0	4.5	5.0
RoE (%)	15.6	18.8	20.3
RoCE (%)	18.7	19.0	20.5
P/E (x)	48.4	34.1	27.2
EV/EBITDA (x)	29.8	21.9	17.6
P/BV (x)	7.0	6.0	5.2
Source- Company, Way2V	Vealth		

Relative performance



Analyst

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INVESTMENT RATIONALE

Dominant position in Abrasives - The abrasives SBU manufactures and distributes rigid and flexible abrasives and adjacent products that are used in the generation of precision, functional or enduring surfaces. The business has 10 manufacturing plants located across India, Russia and Thailand. The marketing entities in North America, Middle East, China and distributors across the globe provide strong market reach in India and over +55 markets globally. Overall, auto and auto-related businesses contribution to CUMI's abrasives business is to the extent of ~ 25- 30%. CUMI supplies both custom-built product (or precision abrasives products) and also the regular (standard products) to the auto and auto-related businesses. These include foundry segments which may deal with auto. Other markets include steel making, roll grinding, medical equipment, and pharma (manufacture of needles, hypodermic syringes). CUMI also works on the mass market in woodworking construction, and home refurbishments. Barring auto, most of the other end markets are <10% of the overall abrasive business. The competitive advantage of the Abrasives business comes from its raw materials sourced from the Electrominerals business of the company besides other suppliers. These inputs are then formulated, and the products are designed by CUMI's engineers. CUMI is backward integrated to a large extent for key raw materials. It acquired the capability through acquisitions. For example, it acquired 84% stake in Volzhsky Abrasive Works Russia in 2007. To get access to alumina, CUMI entered into a JV with Gujarat Mineral Development Corporation (GMDC) to set up brown-fused alumina plant in Gujarat. ~40% of raw material for the abrasives division is still being imported (largely from China). The key product segments are Rigid or Bonded Abrasives, Coated Abrasives, Metal Working Fluid, Super Abrasives and allied products.

Rigid or Bonded Abrasives – These products grind, clean, scour, abrade or remove solid material through a rubbing action. Bonded abrasives are made using glass bonds (vitrified) or phenolic resin bonds.

Coated Abrasives –These products are essentially hard synthetic minerals coated on to paper, fibre, cloth or film and finally formed into different shapes, sizes and types according to application needs. Coated abrasives is an area where India imports significant quantities and CUMI hopes to gain share. Towards end of FY20, CUMI commissioned a new coated maker facility with the objective of gaining share vs. imported supplies.



Bonded & Super Abrasives



















Sheets & Rolls

Power Tool Accessories

Mass Market

Precision Abrasives

Metal, CBN & Diamond Wheels

Machines

Power Tools

Coolants Auto-after















Auto & Componen

Construction Bed

General Ena

Heavy Eng

teel Aerospace

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What are Abrasives? - Abrasives are natural or manufactured substances (running wheels) used to abrade, clean, etch, grind, polish, scour or remove unwanted sold materials by rubbing or impact. Thus, abrasives play a key role in finishing or improving dimensional accuracy of various products which have a wide range of end user applications. Abrasive materials and abrasive products are utilized in several end-user industries such as automobiles, auto ancillary, metalworking, building and construction, woodworking, railways, aerospace and general engineering .Abrasives can be broadly classified into precision and mass market. Precision running wheels can cost between ₹10,000 per wheel to ₹200,000 per wheel. The mass market wheels can range from ₹10 per wheel to ₹120/wheel. Given that abrasives are used across multiple end user industries, demand tends to be relatively resilient. However, given its consumable nature, demand does get affected by economic cycles. That said, replacement demand provides some offset to the impact of downturns. Abrasive technology has stayed relatively stable over the years. While there are no major technology-related barriers to entry, a degree of tech-based differentiation has been achieved by the larger players, especially in case of precision abrasives.

The abrasives industry in India currently has two major players CUMI & Grindwell Norton offering a full range of abrasives products. Apart from these two major players, there are several European, Korean and Japanese players present in the market through their agents or distributors.

Asia Pacific (APAC) represents the largest and the fastest growing Abrasives market - The global Abrasives market which witnessed a slowdown due to COVID-19 pandemic and the resultant lockdown scenario across the globe impacting consumption in America, Europe and Asia Pacific is now getting back on its feet. Asia Pacific represents the largest and the fastest growing market for the Abrasives industry and China continues to be the largest producer of Abrasive materials and Abrasive products. The demand for Abrasives from industries such as transportation, building and construction and other durable goods industries was robust for most part of the year. The industry is dominated by several leading players operating across the globe. The Indian market has been continuously witnessing a shift from manual grinding methods to mechanised processes, ushering in opportunities for new products in the Coated Abrasives segment. The Bonded Abrasives segment constitutes a key consumable in the Construction and Transportation industries, which has demonstrated high growth in the past decade due to rapid urbanisation and increase in disposable income. During FY22, the Indian Abrasives market was growing at healthy pace till Q3FY22. This was helped by growth in various user industries and supported by 'Make in India' initiatives and customers preferring to de-risk their supply chain with local availability. The Auto sector, more so, two wheelers segment continued to witness slow down. During Q4FY22, a clear slowdown was observed across both channel and customer segment, due to all round cost push, uncertain demand outlook owing to the war and disruptions in supply chain. The unorganised market that constituted about 30% of overall market largely dominated by imports continues to be affected due to product non-availability, higher import logistics cost and repeated lockdown situations in China. This has benefited the local organised manufacturers. This segment of the market is predominantly price driven commensurate with performance requirement.

The competitive advantage of Abrasives business comes from its raw materials sourced from the Electrominerals business of the company once such being **Volzhsky Abrasive Works** besides other suppliers. These inputs are then formulated, and the products are designed based on a deep understanding of the end-use applications held by the CUMI's team of application engineers across the globe.

Volzhsky Abrasive Works revenue grew ~39% to ₹7.5bn in 9MFY23 – CUMI acquired Volzhsky Abrasive Works (current stake at 97.44%) in 2007-08. VAW is Russia's largest silicon carbide producer. The company is also into manufacturing





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abrasive materials, abrasive tools and moulded refractories. In FY22, the total sales of Volzhsky Abrasive Works was at RUB 7,293 mn against RUB 6,625 mn in FY21, a growth of 10.2%. The profit after tax for FY22 was at RUB 1,100 mn against RUB 1,051 mn in the previous year. The total assets of Volzhsky Abrasive Works as on 31 March 2022 was at ₹5.89bn, while the consolidated total assets of the group in FY22, was at ₹33.23bn.In FY22, VAW contributed around 21 % of the total revenue and more than a third of the company's total profits. These numbers show how important this subsidiary is from Carborundum Universal's perspective. That is why the geopolitical issues between Russia and Ukraine were expected to give various problems for the company. The key issues involve sanctions imposed on Russia, global supply chain disruption and policy rate hikes, among others. On the input side, the company sources an entire gamut of items from Russia itself. VAW owns mines in Russia that are the source of key raw materials. The company also requires fuel and energy, and the country is self-sufficient in terms of these resources. Thus, all the inputs used in the production are sourced from Russia. On the output side, it is important to understand the turnover composition of VAW. In Q4FY22 the management stated that 42% of the Russian subsidiary's total sales came from domestic markets and around 58% came from exports. Neither VAW nor its products are covered by the sanctions. Silicon carbide is mostly exported to Europe. Any customer who wants to buy from the company is still legally allowed to do so. Accordingly, logistics had become a crucial issue as the company is unable to supply its products to European countries. Earlier, it transported goods to Europe by land and to Asia by sea routes. In all likelihood, the company has found out alternative transport routes to supply its goods to the European nations. Even before the invasion of Ukraine, the key rate in Russia was continuously on the rise. In Jun'21, the policy rate was 5.50%; it is now 9.50%. The additional finance cost hammers Russian units. However, Volzhsky Abrasive Works can take relief from the fact that it has no debt component on its balance sheet.

CUMI products are likely to see demand from several of the Performance linked incentive (PLI) sectors announced by the Government of India.

PLI Sector	CUMI's capability/ potential application areas
Auto	Abrasives, light weight composites
Advanced Cell Chemistry	Graphene, graphite
Electronics manufacturing	High purity SiC2, engineered ceramics
Pharma	equipment manufacturing, hypodermic syringe grinding
Solar PV	Grinding material for PV value chain
Specialty steel	Abrasives, refractories

Source - Company, Way2Wealth

To expand in the European markets completed acquisitions of AWUKO Abrasives Wandmacher Gmbh & Co. KG (AWUKO) and RHODIUS Schleifwerkzeuge (RQS GmbH) in 2022 – In 2022 CUMI Abrasives Germany, a step down wholly owned subsidiary of CUMI completed acquisitions of AWUKO (100% for EUR 6mn) and RHODIUS (100% for ₹4.64bn). These acquisitions enable the company to expand its offering in European markets especially in Coated Abrasive products. Furthermore AWUKO being a stressed asset, is a market leader in Leather and Wood applications with strong presence in Metal and Lacquer applications. The acquisition is in line with CUMI's aggressive inorganic growth plans and its expertise and experience in turning around the performance of stressed assets.

The company's aim is to increase exports, which are currently at 10% of abrasive sales. Abrasive exports tend to be higher margin, as they are dominated by precision abrasives. It is working on new products catering to cold storage, agri processing, energy storage, pharmaceuticals, auto and auto ancillaries. It is also working on improving offerings in the bonded abrasives market in India to gain share from imported supplies.



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Ceramics – Focused on high-value-added products –Key user industries for Ceramics Business are power generation and distribution, mining & ore processing, cement, ferrous and non-ferrous industries, automotive, battery, glass, paper, food grain handling, petrochemicals and ceramic tiles. CUMI's ceramics business is comprised of: (i) INDUSTRIAL CERAMICS and the(ii) REFRACTORIES product groups. INDUSTRIAL CERAMICS business offers advanced ceramics in alumina, zirconia, zirconia toughened alumina and silicon carbide products addressing wear and corrosion protection, electrical insulation, thermal protection and ballistic protection applications. The Industrial Ceramics Business based out of India is largely a global business and majority of the sales volumes are through exports. The company is one of the major players in India, Australia & EU and in specific product groups in other nations. Key target customers of the company's industrial ceramics business include ABB, Bosch, Siemens, and Schneider Electric.

CUMI (Australia) services the Australasian region with a range of wear-resistant alumina ceramic products which include standard tiles, ceramic liners, grinding media, pre-engineered liners and complete fabricated and lined process equipment. CUMI (Australia) has grown to be one of the largest suppliers of wear-resistant alumina ceramics in the region.

The Industrial Ceramics business has two verticals – (i) Wear Materials offering wear protection solutions for various industrial applications; and (ii) Engineered Technical Ceramics manufacturing high-end engineered ceramics and metallized ceramics.

Under Wear Materials, CUMI offers wear protection solutions using advanced ceramics, rubber-backed ceramics and composites in the form of wear-resistant liners, ceramic-lined equipment for original equipment manufacturer (OEM) customers and repair & maintenance across key industries mentioned above.

Under Engineered Technical Ceramics, CUMI is a significant manufacturer of metallized cylinders in India for high-voltage power transmission and distribution and caters to leading customers globally. The new facility at Hosur is fully operational with capacity of 1.9mn cylinders p.a. The business has drawn up a plan to be a global leader in metallized ceramics for vacuum interrupters. Towards this, capacities have been further expanded by the addition of a new continuous metallization furnace in recent years. This facility would help increase volumes with existing customers and in entering new markets.









Grinding

Wear Resistant Liners

Lined Equipment

Technical Ceramics







Metallized Ceramics





A





Source - Company Reports





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CUMI signed a "Licensing Agreement for Transfer of Technology" with the Defence Research and Development Organisation (DRDO) in Mar'23 for manufacturing Ceramic Radomes used in aerospace and missile systems. Ceramic Radomes is regarded as an essential, state-of-the-art technology for ballistic and tactical missiles and high-performance aircraft. Missiles undergo extremely high surface temperatures while travelling through the atmosphere, and while re-entering it from space. To withstand those temperatures, Radomes located at the tip of a missile are made of ceramic. The Ceramic Radomes have been developed indigenously by Research Centre Imarat (RCI), one of the premier DRDO labs in the Dr APJ Abdul Kalam Missile Complex, which has developed India's missile arsenal. RCI spearheads R&D in a diverse range of avionics systems for missile and aerospace applications.

CUMI has extensive experience in engineering lightweight ceramic ballistic solutions, such as bulletproof vests, using zirconia-toughened alumina and silicon carbide. CUMI's lightweight ceramic materials are also used for providing high levels of ballistic and blast-proof protection for armoured vehicles.

Refractory is a material that has the ability to withstand load when subjected to high temperatures up to 2000 degrees Celsius in the presence of metals, non-metals and chemical reactions. It is used in applications that require extreme resistance to heat, such as reactors and furnace linings. CUMI is a leading player in complex shaped high temperature application refractories, refractory cements, monolithic castables, and pre-cast pre-fired refractories. The key user industries for Refractory Business are iron & steel, secondary steel, glass melting, cement kilns, carbon black reactors, rocket launch pads, ceramics, petrochemicals, thermal power plants, non-ferrous melting, foundry, heat treatment furnaces etc. Glass industry project, Ceramic industry for Kiln furniture, Insulating Firebrick (IFB) are the main growth drivers for coming five years as per the management.







Precast Shapes



Composites















Source - Company Reports

3. Electrominerals – Increasing share of Specialties – The Electrominerals Business of the company spans India, Russia and South Africa with eight manufacturing facilities covering product groups – (i) Fused Alumina (comprising brown and its variants and white fused alumina), (ii) Silicon Carbide (crude, macro and fine), and (iii) Alumina Zirconia. In Silicon Carbide, CUMI has high-single-digit market share globally and is amongst the most cost competitive globally. In case of Fused Alumina, CUMI products are 5-10% more expensive compared to Chinese imports on a landed basis. Fused alumina is largely supplied to the abrasives and refractory industries. The company also manufactures a range of 'specialties' such as semi friable alumina, surface and thermally treated grains, solgel derived alumina called as Azure S, specialty alumina and ceramic fine powders for niche markets.





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To enhance operational competencies, the business operates its own bauxite and sand mines and a 12 MW hydel power plant to insulate it from fluctuations in power tariffs. The power requirements of the company are driven by the requirements of the Electrominerals Business. The power requirement is partly met out of own generation from the Maniyar Hydroelectric plant in Kerala (India). The entire production of power from Maniyar is utilized by the Electrominerals Business. Apart from this, electricity is generated at the company's subsidiary SEDCO and consumed at all its locations in Tamil Nadu (India). The rest of the requirements for electricity are managed by purchase from respective State Electricity Boards. Utilization of power remains one of the key factors which can impact the profitability either favorably or adversely based on the changes in the power cost. As part of its strategy to build competitiveness, the company continues to look for opportunities to add to its captive power generation. In Russia, the Silicon Carbide operations which also consume large quantities of power sources it from local utility.

Key user industries for this business are abrasives, refractories, steel, brake linings, nuclear energy, wooden laminates, friction composites, diesel particulate filter (DPF), semiconductor and others.



Source - Company Reports

Target is to increase the share of specialties to 35% - ~80% of the business is driven by commoditised products and is a function of demand for abrasives and refractories. ~20% of demand comes from specialised businesses which find applications in diesel particulate filters (DPF), graphene, batter storage, electronics, etc. Over the medium term, CUMI targets to increase the share of specialties to 35% from the current 20%. For this, it has been investing in development of new specialties. It continues to pursue its focus on new and emerging areas of opportunities such as graphene, battery materials and related areas through tieups for technology and by commissioning pilot scale plants. The graphene facility started functioning in recent years and the products are being adapted/functionalized for various applications like Biomedicals, Composite & Coatings, Electronics, Sensors etc. Besides its applications in semiconducting, SiC is also used for products such as bulletproof vests, ceramic plates, thin filament pyrometry, foundry crucibles, and car clutches. The transformational products like Graphene and high purity Silicon Carbides (SiC) are still evolving with testing & approval for selected applications and the management is confident of scaling up to a commercial level from 2023.



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Completed the acquisition of in PLUSS Advanced Technologies Pvt Ltd in Jan'22 to enhance working in providing new specialties to emerging opportunities -CUMI completed the acquisition for acquiring a controlling stake in PLUSS Advanced Technologies Private Limited (PLUSS), a specialty materials research and manufacturing company, at an investment of ₹1.15bn for 72% stake on 31 October 2021. CUMI acquired stake from existing shareholders including the promoters and Tata Capital Innovations Fund, a venture capital fund of Tata Capital (which is a financial investor in PLUSS). CUMI funded the transaction through internal accruals. PLUSS' FY19/20/21/22 revenue stood at ₹287mn / ₹270mn / ₹363mn / ₹218mn. PLUSS incurred a loss of ₹96mn in FY22. PLUSS is involved in the fields of phase change materials (PCM) for thermal energy storage and specialty polymeric additives for polymer recycling and enhancing mechanical properties. PCMs are substances which absorb or release energy during phase transition, from solid to liquid and vice versa. PLUSS plays a key role in the cold chain logistics of Sputnik V COVID vaccines. PLUSS' products cover, inorganic, organic and form stable functionalities and range from -75°C to +89°C. PLUSS has a total of 35 SKUs. PLUSS was the first to develop leak-proof PCMs and is a pioneer in hydrated salt-based PCMs globally, with patents covering Europe, North and South America and Asian geographies. It owns 20+ patents and trademarks. Opportunities for PLUSS products in pharma cold chain, refrigeration & food supply chain, medical devices, buildings and HVAC are emerging in India as well as globally. PLUSS has 180 employees and manufacturing footprint over three facilities in Bawal, Gurugram, with laboratories recognized by the Department of Scientific & Industrial Research.

Key Growth drivers for the CUMI - Carborundum Universal (CUMI) is one of the two large players in the Indian abrasives market. Market structure is favorable, with two players CUMI and Grindwell Norton (NR) having ~55% market share. CUMI's ceramics business is knowledge based requiring application engineering skills, customized designs, high degree of product reliability and durability. This creates customer lock-in and higher margins. Domestic abrasive business has pan-India distribution acting as entry barrier for new players. Private industrial capex appears to be getting into a whole new cycle after the pandemic hiccup - this time around armed with a new set of growth drivers. The new capex cycle to resemble the one seen in the first decade of the century (2000's). As per the 84th Survey of Projects Investment in India conducted in 1st week of Jan'23 indicated healthy growth in fresh investment by both the Government and the Private sectors. Step up in capex intentions by both the Central and State government agencies and a number of high-ticket projects by the Private sector saw the aggregate fresh investments in 9MFY23 (i.e. Q1-Q3/FY23) increasing by a healthy 53.18%. In all, 7,555 new projects worth ₹21tn were announced in Q1-Q3/FY23 as against 7,978 new projects worth ₹13.8tn announced during the same period a year ago. With large-size companies dominating the investment landscape in recent years, the number of mega projects with a cost of +₹10bn has increased. In Q1-Q3/FY23, 280 mega projects were announced. These projects, with an aggregate investment of ₹14.5tn accounted for around two-thirds of the total fresh investment announced during Q1-Q3/FY23. A year ago, during the same period, 217 mega projects worth ₹8.3tn were announced. The 280 mega projects include 29 super mega projects (cost +₹100bn) consisting of eight Green Hydrogen and Ammonia projects and six Semiconductor and Display Fab projects. Enabled by first, PLI (production linked incentive scheme) will potentially induce capex growth in new age sectors where we are largely import dependent (telecom equipment, mobile, IT hardware, battery, etc). Second, large players in metals and cement, where utilisation levels are elevated and balance sheets healthy, will continue on their capex plans (brownfield in near term and green field in medium to long term). Environmental clearances have also picked up pace with over 12,000 environment clearances granted to projects in 2022, a 20 times increase since 2018, compared to rise of 65% YoY in 2021 after falling 36% in 2020 from 2019. FDI investment in India for 9MFY23 was at US\$ 36.75bn (-15% YoY). India's industrial production index (IIP) grew to 5.6% in Feb'23 from 5.2% in Jan'23, significant rise from 4.3% in Dec'22, And for the 11-month period from Apr'22 to Feb'23, manufacturing rose 4.9% YoY, mining 5.7% and electricity surged 10%.





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20th April 2023

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Research Desk

Risks

A slower-than-expected pickup in domestic capex and macro revival in India. Inability to pass through raw material price volatility, logistical challenges, technological obsolescence, keener-than-expected competition and any delays in the turnaround of operations of Rhodius and Awuko may continue to impact its profitability.

View

CUMI, which is well established in the abrasives, industrial ceramics and minerals spaces. With the domestic capex revival, CUMI should be a beneficiary with its wide product portfolio and diversified customer base. CUMI's businesses are leveraged to both consumable demand growth and new projects, and we see healthy medium-term trends supported by government push on promoting domestic manufacturing. Measures to move up the value chain across exports businesses augur well for profitability. CUMI's ceramics business is knowledge based requiring application engineering skills, customised designs, high degree of product reliability and durability. This creates customer lock-in and higher margins. Domestic abrasive business has pan-India distribution acting as entry barrier for new players. The company is optimistic about demand across segments, including subsidiaries, despite global headwinds. In abrasives, demand from the auto sector is likely to be favourable, while the farm equipments and other price-sensitive sectors may face near-term headwinds. Moreover, ceramics and electro-minerals are on a healthy growth trajectory. Recent acquisitions would also see significant improvement in the coming years on both sales and profitability post establishment of a new team, set up of infrastructure, changes in product mix, easing out of supply-side constraints, and customer acquisition. Hence, we expect considerable improvement in its performance from FY24 and recommend it as a BUY with target range ₹1160-1180 trading at P/E 27.2x FY25E EPS ₹36.6.

Q3FY23 Performance - Revenue/ EBITDA/ PAT grew 32%/~9%/7.4%

Total revenue grew by 32% YoY to ₹11,870.7mn. Operating profit grew at a slower pace of 8.5% YoY to ₹1,710.3mn due to higher employee cost and other expenses on account of integration of new acquisitions — Rhodius and Awuko. Consequently, EBITDA margins declined by 312 bps YoY to 14.4%.PAT grew by 7.4% YoY to ₹1,091.1mn owing to higher other income despite the increase in depreciation cost and interest. All segments — Abrasives/Ceramics/Electrominerals reported robust YoY revenue growth of 50%/~24%/~14%. Profitability in Ceramics and Electro-minerals business improved as PBIT grew by 54%/~31% YoY on account of higher realization and improvement in product mix. PBIT margin came in at 25.1%/20% for ceramics and electro-minerals respectively.

Subsidiaries also performed well as new acquisitions – Rhodius and Awuko – contributed ₹1.45bn to total sales. The company expects Rhodius to be EBIT positive by FY24 and achieve EBIT margin of 12-15% by FY27. Auwko may register a small loss in FY24.An increase in energy cost in Europe may impact Rhodius going forward. Steep rise in energy cost has not yet impacted as the company already has contracts for electricity supplies. However, FY24 may be impacted due to high energy cost although it will be partially offset by the decline in some of the material cost.

As per the management, the Abrasives demand outlook is facing slowdown in demand from two wheelers and farm equipments and higher competition from imports. In addition, there is slowdown in government projects in specific markets. However, with improving product mix, the company is hopeful of better growth and margins in the coming years. Electro minerals margin on a sustainable basis would be around 15% in the coming years

The capex incurred during 9MFY23 was ₹2.67bn at consolidated level. The debt equity ratio at the consolidated level was at 0.14. Debt on standalone level is ₹2.65bn, while consolidated debt is ₹3.84bn. Net cash stands at ₹300mn.





BUY

CMP: ₹994.9 MCAP: ₹189bn 20th April 2023

Q3FY23 FINANCIALS (₹mn) **Particulars Q3FY23** Q3FY22 YoY(%) **Q2FY23** QoQ(%) **9MFY23 9MFY22** YoY(%) **Operating Income** 11,870.7 8,992.4 32.0 11,277.7 5.3 34,546.7 24,554.6 40.7 4,184.6 12,166.9 3,062.7 36.6 4,128.5 1.4 8,339.9 45.9 Cost of materials consumed 55.2 (4.9)71.3 Purchases of stock-in-trade 381.7 245.9 401.2 1,081.1 631.2 1,127.3 Changes in inventories (157.1)(12.8)(529.4)(70.3)(674.0)(359.2)87.6 46.0 **Total Raw Material Cost** 4,409.2 3,295.8 33.8 4,000.3 10.2 12,574.0 8,611.9 Power & Fuels 1,286.8 1,115.8 15.3 1,249.3 3.0 3,726.5 3,151.2 18.3 Staff Expenditure 77.9 1,703.1 7.2 75.4 1,825.0 1,025.6 5,256.3 2,997.1 Other Expenditure 2,639.4 1,979.4 33.3 2,694.7 (2.1)8,374.6 5,537.4 51.2 **EBITDA** 1,710.3 1,575.8 8.5 1,630.3 4.9 4,615.3 4,257.0 8.4 198.5 Other Income 240.0 89.8 167.3 80.4 569.1 274.1 107.6 1,346.5 Depreciation 473.2 279.1 69.5 445.0 6.3 802.5 67.8 **EBIT** 1,477.1 1,386.5 6.5 1,265.7 3,728.6 16.7 3,837.9 2.9 68.2 14.7 363.9 50.5 35.0 163.3 32.7 399.4 Share of Profit from Associate (Net of Tax) 37.8 37.5 73.5 39.3 20.8 81.7 8.0 102.4 Share of Profit from JV(Net of Tax) 25.1 19.9 26.1 58.3 (56.9)126.4 68.9 83.5 **PBT** 1,471.8 1,412.5 4.2 1,311.0 12.3 3,903.4 3,838.3 1.7 Tax 339.5 303.4 11.9 374.1 (9.2)974.3 922.3 5.6 Minority Interest 41.2 93.6 (56.0)47.0 (12.3)160.4 152.9 4.9 7.4 889.9 **Net Profit** 1,091.1 1,015.5 22.6 2,768.7 2,763.1 0.2 EPS (₹) 5.8 5.4 4.7 14.6 14.6 Source- Company, Way2Wealth Q2FY23 Operating Cost as a % of Net Sales Q3FY22 YoY (BPS) 9MFY23 Q3FY23 QoQ (BPS) **9MFY22** YoY (BPS) Raw Material Cost 35.5 167 35.1 37.1 36.7 49 36.4 132 Power & Fuels 11.1 12.8 10.8 12.4 (157)(24)10.8 (205)12.2 Staff Cost 397 15.1 27 15.2 301 15.4 11.4 22.2 22.0 23.9 24.2 Other Exps 22 22.6 (166)169 Q3FY23 Q3FY22 YoY (BPS) **Q2FY23** QoQ (BPS) 9MFY22 **9MFY23** YoY (BPS) Margins 14.5 EBITDA (%) 14.4 17.5 (312)(5)13.4 17.3 (398)EBIT (%) 12.4 15.4 (298)11.2 122 11.1 15.2 (408)PBT(%) 33.4 42.9 (948)32.8 61 31.0 44.6 (1,353)NPM (%) 9.2 11.3 (210)7.9 130 8.0 11.3 (324)

Segmental Revenue (₹ mn)	Q3FY23	Q3FY22	YoY(%)	Q2FY23	QoQ(%)	9MFY23	9MFY22	YoY(%)
Abrasives	5,129.6	3,414.0	50.3	4,838.9	6.0	15,102.2	9,392.2	60.8
Ceramics	2,644.4	2,132.2	24.0	2,542.9	4.0	7,619.3	5,960.3	27.8
Electrochemicals	4,123.3	3,607.7	14.3	4,095.5	0.7	12,283.0	9,719.2	26.4
Others	338.5	29.1	1,062.8	334.2	1.3	961.5	606.0	58.7
Less-Inter segment	510.9	507.7	0.6	646.0	(20.9)	1,787.1	1,371.1	30.3
TOTAL	11,724.9	8,675.3	35.2	11,165.5	5.0	34,178.9	24,306.6	40.6

EBIT (₹ mn)	Q3FY23	Q3FY22	YoY(%)	Q2FY23	QoQ(%)	9MFY23	9MFY22	YoY(%)
Abrasives	207.7	467.5	(55.6)	279.8	(25.8)	666.2	1,291.7	(48.4)
Ceramics	662.9	429.3	54.4	645.1	2.8	1,890.8	1,241.9	52.3
Electrochemicals	822.8	628.0	31.0	691.6	19.0	2,104.0	1,503.4	39.9
Others	(36.0)	17.2	(309.3)	(40.8)	(11.8)	(136.5)	66.9	(304.0)

EBIT Margin (%)	Q3FY23	Q3FY22	YoY (BPS)	Q2FY23	QoQ (BPS)	9MFY23	9MFY22	YoY (BPS)
Abrasives	4.0	13.7	(964)	5.8	(173)	4.4	13.8	(934)
Ceramics	25.1	20.1	493	25.4	(30)	24.8	20.8	398
Electrochemicals	20.0	17.4	255	16.9	307	17.1	15.5	166
Others	(10.6)	59.1	(6,972)	(12.2)	157	(14.2)	11.0	(2,524)

Source - Company, Way2Wealth



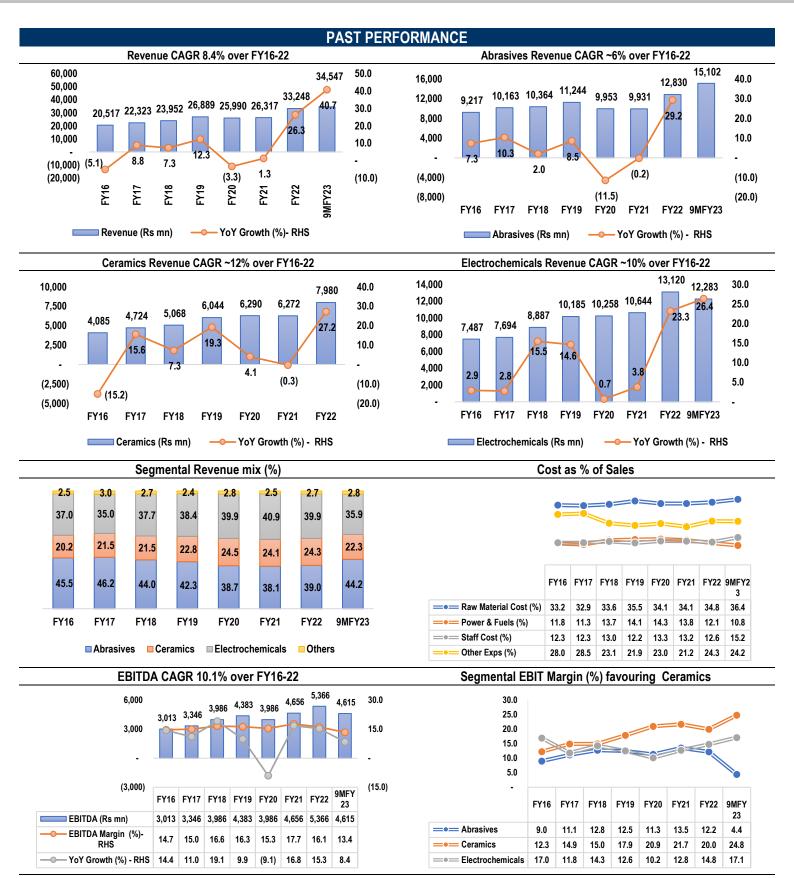
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Source - Company, Way2Wealth



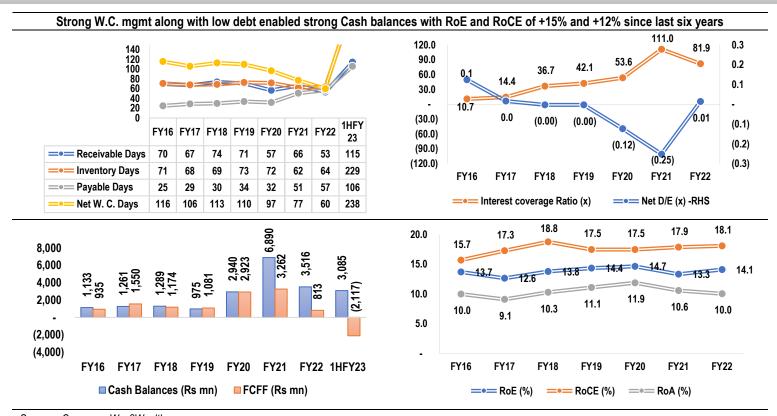
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Source - Company, Way2Wealth

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Particulars	FY16	FY17	FY18	FY19	FY20	

										(₹mn
Particulars	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23E	FY24E	FY25E
Abrasives	9,217	10,163	10,364	11,244	9,953	9,931	12,830	20,748	23,768	27,487
Ceramics	4,085	4,724	5,068	6,044	6,290	6,272	7,980	10,119	12,616	15,617
Electrochemicals	7,487	7,694	8,887	10,185	10,258	10,644	13,120	16,309	17,534	19,199
Revenue	20,517	22,323	23,952	26,889	25,990	26,317	33,248	47,176	53,918	62,303
EBITDA	3,013	3,346	3,986	4,383	3,986	4,656	5,366	6,381	8,834	11,179
EBITDA Margin (%)	14.7	15.0	16.6	16.3	15.3	17.7	16.1	13.5	16.4	17.9
Net Profit	1,441	1,749	2,156	2,477	2,724	2,843	3,333	3,895	5,539	6,947
EPS (₹)	7.6	9.3	11.4	13.1	14.4	15.0	17.6	20.5	29.2	36.6
DPS (₹)	1.5	1.8	2.3	2.8	3.0	3.0	3.5	4.0	4.5	5.0
RoE (%)	13.7	12.6	13.8	14.4	14.7	13.3	14.1	15.6	18.8	20.3
RoCE (%)	15.7	17.3	18.8	17.5	17.5	17.9	18.1	18.7	19.0	20.5
P/E (x)	130.1	107.4	87.2	76.0	69.2	66.3	56.6	48.4	34.1	27.2
EV/EBITDA (x)	63.2	56.6	47.4	43.1	46.8	39.4	35.3	29.8	21.9	17.6
P/BV (x)	15.5	13.0	11.6	10.6	9.9	8.7	7.7	7.0	6.0	5.2
Net D/E (x)	0.1	0.0	(0.0)	(0.0)	(0.1)	(0.3)	0.0	0.1	0.1	0.1
Interest coverage Ratio (x)	10.7	14.4	36.7	42.1	53.6	111.0	81.9	299.3	33.6	42.7
Cash Balances	1,133	1,261	1,289	975	2,940	6,890	3,516	2,491	4,437	6,893
FCFF	935	1.550	1.174	1.081	2.923	3.262	813	(372)	3.496	4.176

Source- Company, Way2Wealth



CARBORUNDUM UNIVERSAL LTD (CUMI)



Abrasives

CMP: ₹994.9

MCAP: ₹189bn

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PEER COMPARISON

Peer Comparison		MCAP (Rs mn)	Revenue (Rs mn)			EBITDA (Rs mn)			EBITDA Margin (%)			Net Profit (Rs mn)				EPS (Rs)				DPS (Rs)					
			FY20	FY21	FY22	9MFY23	FY20	FY21	FY22	9MFY23	FY20	FY21	FY22	9MFY23	FY20	FY21	FY22	9MFY23	FY20	FY21	FY22	9MFY23	FY20	FY21	FY22
Carborundum Universal (CUMI)	994.9	188,975.3	25,990	26,317	33,248	34,547	3,986	4,656	5,366	4,615	15.3	17.7	16.1	13.4	2,724	2,843	3,333	2,769	14.4	15.0	17.6	14.6	3.0	3.0	3.5
Grindwell Norton (GNO)	1,859.4	205,867.2	15,796	16,379	20,128	18,765	2,645	3,241	4,014	3,703	16.7	19.8	19.9	19.7	1,825	2,392	2,957	2,627	16.5	21.6	26.7	23.7	7.5	9.5	12.0

	CMP (Rs)	MCAP (Rs mn)	RoE (%)			RoCE (%)			P/E (x)			EV/EBITDA (x)			P/BV (x)			Interest Coverage (x)		
			FY20	FY21	FY22	FY20	FY21	FY22	FY20	FY21	FY22	FY20	FY21	FY22	FY20	FY21	FY22	FY20	FY21	FY22
Carborundum Universal (CUMI)	994.9	188,975.3	14.7	13.3	14.1	17.5	17.9	18.1	69.2	66.3	56.6	46.8	39.4	35.3	9.9	8.7	7.7	53.6	111.0	81.9
Grindwell Norton (GNO)	1,859.4	205,867.2	15.4	17.5	18.9	19.7	22.4	24.6	112.8	86.1	69.6	77.9	63.3	50.8	17.1	15.0	13.1	55.3	93.8	110.3

	CMP (Rs)	MCAP (Rs mn)	D/E (X)			MCAP/Sales (x)			NWC Days			Cash	Balances (R	s mn)	FCFF (Rs mn)			
			FY20	FY21	FY22	FY20	FY21	FY22	FY20	FY21	FY22	FY20	FY21	FY22	FY20	FY21	FY22	
Carborundum Universal (CUMI)	994.9	188,975.3	0.03	0.06	0.16	7.3	7.2	5.7	97	77	60	2,940	6,890	3,516	2,923	3,262	813	
Grindwell Norton (GNO)	1,859.4	205,867.2	0.02	0.05	0.05	13.0	12.6	10.2	87	50	92	147	1,299	2,780	2,672	2,829	610	

Source - Company, Way2Wealth



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MCAP: ₹189bn

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TECHNICAL VIEW

CARBORUNI has signalled a breakout from rounding bottom reversal pattern in the second week of March 2023 and indicating long term bullish structure. After long an all-time high 1045.70, the stock witnessed profit booking and immediately took support level buying at 920-925 levels which may lead to frame consolidation pattern on weekly chart. With medium term price pattern resembling to an inverted head and shoulder structure, it paves way for sharp upside of 6- 8% from current levels. In terms of Momentum indicator, MACD is in consolidation territory on the weekly chart and breakout of 1021/1035 levels would take the stock at 1189/1240 levels. On the lower side, the stock is placed well above its long term daily Exponential Moving Average, namely, 200(921), which support the uptrend argument and also going forward the above 200 days EMA could act as a good long term support for the stock. Going forward, Overall, we advocate to Buy CARBORUNI around 970-985 range and add on dips till 963- 955for above mentioned targets 1189 then 1240 levels. On the downside 921/870 would the act as strong support and slip below that would negate above positive view.



Source: Falcon 7





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Disclosure of Interest Statement CARBORUNDUM UNIVERSAL LTD (CUMI) as on 20 April 2023

Name of the Security	CARBORUNDUM UNIVERSAL (CUMI)
Name of the analyst	Jayakanth Kasthuri
Analysts' ownership of any stock related to the information contained	NIL
Financial Interest Analyst: Analyst's Relative: Yes / No Analyst's Associate/Firm: Yes/No	No No No
Conflict of Interest	177
	No
Receipt of Compensation	No
Way2Wealth ownership of any stock related to the information contained	NIL
Broking relationship with company covered	NIL
Investment Banking relationship with company covered	NIL

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