



# CUMI

**REFRACTORY SOLUTIONS  
FOR CARBON BLACK INDUSTRY**



**CARBORUNDUM UNIVERSAL LIMITED**  
SUPER REFRACTORIES



CUMI is the flagship company of the Murugappa Group, one of India's leading business conglomerate. The Murugappa Group with 29 major companies is engaged in diverse areas of business such as Engineering, Abrasives, Finance, General Insurance, Cycles, Sugar, Farm Inputs, Fertilizers, Plantations, Bio-products, Nutraceuticals, IT and Construction.

Carborundum Universal Limited or CUMI is a pioneer and market leader in Abrasives and Super Refractories in India. Besides being a leading manufacturer of refractory, industrial and ceramic products in India, CUMI is amongst the largest producers of Silicon Carbide and Zirconia in the world.

## Super Refractories

CUMI's refractory division was started in 1965, pioneering the manufacture of Silicon Carbide, Mullite, High Alumina, Insulation bricks and low cement castables in India. Today, the company's state-of-the-art plants in India and overseas manufacture a wide range of fired, monolithics and precast products for ceramics, glass, carbon black, ferrous and non ferrous industries., with exports to major countries across the globe.

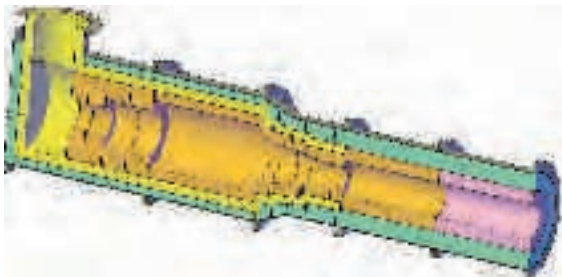
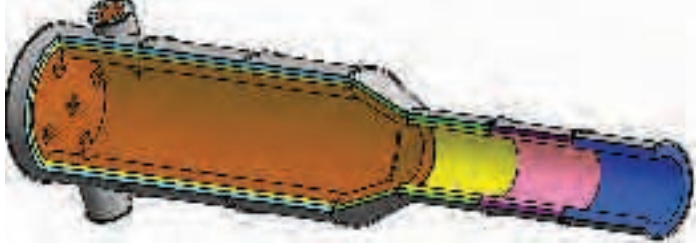











Product innovation and value engineering define the division's customer centric focus and Total Solutions work culture. Besides the capability to manufacture customized complex shapes for critical applications, CUMI's Super



CUMI's Refractory plant in India

Refractories division also offers technical expertise and application engineering support that is customised to suit the varied needs of different user industries.

## Refractory Applications for Carbon Black Industry

Hard Black Reactor (Typical Diagram)	Soft Black Reactor (Typical Diagram of Carcass Reactor)	
		
<ul style="list-style-type: none"> <li> <b>CUMILOX 101 HB</b> (99.5% Alumina Dense Shape)</li> <li> <b>CUMICRETE CA 66</b> (94% Alumina Dense Castable)</li> <li> <b>CUMICRETE CA 58</b> (94% Alumina, Bubble Alumina Based Insulation Castable)</li> <li> <b>CUMILOX 201 HF</b> (90% Alumina Dense Shape/Brick)</li> </ul>	<ul style="list-style-type: none"> <li> <b>CUMILOX 101HF</b> (99.5% Alumina Dense Shape/Brick)</li> <li> <b>CUMILITE WHF</b> (Fused Mullite Shape/Brick)</li> <li> <b>CUMILAG B101</b> (98.5% Alumina Dense Shape/Brick)</li> <li> <b>CUMIRITE M</b> (55% Alumina Shape/Brick)</li> </ul>	<ul style="list-style-type: none"> <li> <b>CUMILOX 201HF / CUMILOX 90</b> (90% Alumina Dense Shape/Brick)</li> <li> <b>CUMIHICAST 70</b> (70% Alumina LCC)</li> <li> <b>CUMIHICAST SUPER</b> (45% Alumina LCC)</li> </ul>





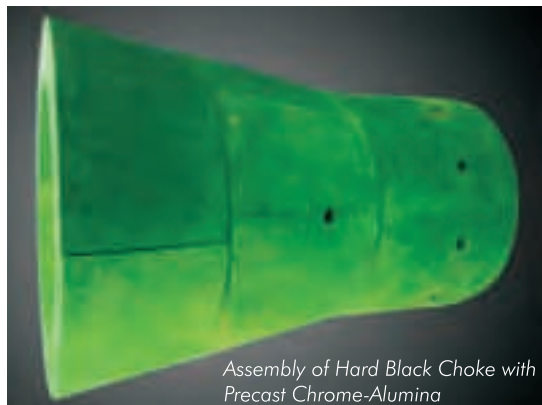
## Product Data

Quality	Chemical Analysis (%)			Bulk Density (gm/cc)	Apparent Porosity (%)	Cold Crushing Strength (Kg/cm <sup>2</sup> )
	Al <sub>2</sub> O <sub>3</sub>	SiO <sub>2</sub>	Fe <sub>2</sub> O <sub>3</sub>			
CUMILOX 101HB	99.45	0.12	0.06	3.30	18.0	800
CUMILOX 101HF	99.45	0.15	0.06	3.20	19.0	1050
CUMILOX CR10	85.50	10.50 (Cr <sub>2</sub> O <sub>3</sub> )		3.50	-	800
CUMILOX 201HF	90.38	8.60	0.13	3.00	16.0	1300
CUMILITE WHF	77.42	21.01	0.19	2.65	17.5	1000
CUMIRITE M	57.78	41.23	0.82	2.22	21.0	600
CUMILAG B101	98.50	0.70	0.12	1.45	50.0	75

Above properties are all typical test data based on standard sample

Quality	Chemical Analysis (%)			Bulk Density (gm/cc, min.)	Cold Crushing Strength (Kg/cm <sup>2</sup> , min)
	Al <sub>2</sub> O <sub>3</sub> (min.)	CaO (max.)	Fe <sub>2</sub> O <sub>3</sub> (max.)		
CUMICRETE CA 58	94.00	6.00	0.30	1.45	100
CUMICRETE CA 66	94.00	4.00	0.10	2.80	600
CUMIHICAST EXTRA	80.00	2.00	1.80	2.80	800
CUMIHICAST 70	70.00	2.00	1.50	2.70	800
CUMIHICAST SUPER	45.00	1.50	1.30	2.25	735
CUMICRETE CK 14	50.00	4.00	1.30	2.10	400

Above properties are test data based on standard sample after drying at 110°C





## CUMI's Worldwide Network At Your Service

### ■ Head Office

Carborundum Universal Limited  
105, Sreela Terrace III Floor, Western Side,  
Gandhi Nagar I Main Road, Adyar, Chennai – 600020  
Phone: +91 44 42187812/13/14/15  
E-mail : rajankn@cumi.murugappa.com

### ■ Plants

Carborundum Universal Limited  
Plot Nos. 102 & 103, SIPCOT Industrial Complex,  
Phase II, Ranipet – 632403  
Phone: +91 4172 244197 / 244582 / 244951 / 645625  
Fax: +91 4172 255396

Carborundum Universal Limited  
Mungileri Village, Vinnampalli Post, Katpadi Taluk  
Vellore District – 632516  
Phone: +91 4172 244197 / 244582 / 244951 / 645625  
Fax: +91 4172 244982  
Email: cumiceramicsranipet@cumi.murugappa.com

Carborundum Universal Limited  
Plot No.48-51, Adhartal Industrial Estate,  
PO Jabalpur - 482004, Madhya Pradesh  
Phone: +91 761 2680759, Fax: +91 761 2680678

JSC Volzhsky Abrasive Works  
Volzhsky, Volgograd Region, Road 6, 18  
Russia 404130  
E - mail: export@vabz.ru

### ■ Marketing Offices – India

**Ahmedabad**  
No 303, Mahalaya  
Near Hotel President  
Off. C.G.Road, Near Municipal Market  
Navranpura, Ahmedabad  
Phone : +91 79 26422501

**Kolkata**  
Shrachi Tower, Unit - 1A, 1st Floor,  
PO Kasba, Kolkata-700 107  
Phone: +91 33 24436461 / 62 / 63

**Mumbai**  
P.B. No. 962, United India Bldg. III Floor,  
Sir Pherozshah Mehta Road, Mumbai – 400001  
Phone: +91 22 22663894/ 1360

**New Delhi**  
1 /33, Flat No. 203, Gangaram Hospital Marg,  
Rajinder Nagar, New Delhi – 110060  
Phone: +91 11 25726908

**Secunderabad**  
1st Floor, Sri Venkat Reddy Complex, Block-1  
No.1, Tarbund Cross Road,  
Phone: +91 40 27894889/ 4132

### ■ Global Associates

**Italy**  
Enrico LUGLI  
Agenzia di Vendita s.n.c.,  
Via Giovanni XXIII 38, 16132 GENOVA-ITALY  
Phone : + 010 522 00 11, Fax : + 010 522 09 22  
E-mail : lugli.snc@tin.it

**South Korea**  
Hanse Refractories & Minerals Ltd. Rayong – 21140  
406-6, Baikbong, Cheonbuk, Pyongteak,  
Kyunggi, Republic of Korea,  
Phone : + 82 31 6830636, Fax : + 82 31 6830639  
E-mail : hanseref@hanseref.co.kr

### ■ Subsidiaries

**Australia**  
CUMI (Australia) Pty Ltd.  
99-105 Lott Street, Carrington, NSW 2294, Australia  
Phone : + 61 02 4940 0035, Fax : + 61 02 4940 0037  
E-mail : usk@cumi.com.au

**Canada**  
CUMI Canada Inc., 149, Industrial Crescent,  
Summerside, PE, CIN 5P8  
Phone : +902 436 9500  
E-mail : harikumars@cumi.murugappa.com

**China**  
Carborundum Universal Limited,  
Beijing Representative Office,  
Unit no. 21B- Tower no.1  
Dong road, Chaoyang dist., Beijing 100028 P.R. China  
Phone / Fax : + 00 86-10-84513157  
E-mail : TiwariPraveen@cumi.murugappa.com

**Europe**  
Carborundum Universal Limited  
Korfakker 46 a, 5625 SP Eindhoven, Netherlands  
Phone : 0031 (0)40 842711, Fax : 0031 (0)40 842711,  
PH/Fax : 0031 (0)40 8427211  
E-mail : DeshpandeSandeep@cumi.murugappa.com

**Russia**  
JSC Volzhsky Abrasive Works  
Volzhsky, Volgograd Region, Road 6, 18  
Russia 404130  
E-mail : export@vabz.ru

**South Africa**  
Foskor Zirconia (Proprietary) Limited  
27 Selati Road, Phalaborwa,  
Limpopo Province, 1390, South Africa  
Te I. Number : +27 15 789 2346  
Fax Number : +27 15 789 2463  
E-mail : zirc@foskor.co.za

**Thailand**  
Wendt Grinding Technologies Ltd  
Thailand  
Phone : 66 (0)38-955490 (Dir), 955491-2,  
Fax : 66 (0)38-955493  
E-mail : praveen@wendt-thai.com

**USA**  
CUMI America Inc.  
3940 Olympic Blvd, Ste 400, Erlanger, KY 41042 USA  
Phone : + 1 859 372 6606, Fax : + 1 859 372 6607  
E-mail : cumiusa@aol.com

**West Asia & Africa**  
CUMI Middle East Fze  
P.O. Box 10559, Rak Free Trade Zone,  
Ras Al Khaimah, UAE  
Phone : + 971 07 2046181, Fax : + 971 07 2046182

For more information please visit us at :  
[www.cumiceramics.com](http://www.cumiceramics.com)

Registered Office: "Parry House", 6th Floor, 43, Moore Street,  
Chennai – 600001, Phone: +91 44 42216789  
[www.cumi-murugappa.com](http://www.cumi-murugappa.com)

NOVEMBER 2009