ABS Refractories Pvt. Ltd

(A Unit of Mittal Group)

Product Catalog

Works :-
P.O. Niwar, Near Niwar Railway Station Katni, Madhya Pradesh 483442, India

Head Office Address:
26 Commercial Complex, Housing Board Colony, Katni, Madhya Pradesh, 483504

About us

Since 1986 we are meeting the requirements of Iron and Steel Industries, Cement Industries, Sugar Industries, Fertilizer and Chemical Industries, Petrochemical Industries, Industrial Furnaces/Boilers, Power Plants, Ceramic Industries etc.

Within our wide customer base in India and oversea we have a reputation of manufacturing high quality, economical products keeping customer consideration in focus.

Our wide range of products include Fireclay and High Alumina Bricks, Insulation Bricks, Refractory Bed Supports, Castables, Mortars, Ramming and Gunning Masses, etc confirming to ASTM, DIN, GOST & ISI specifications.

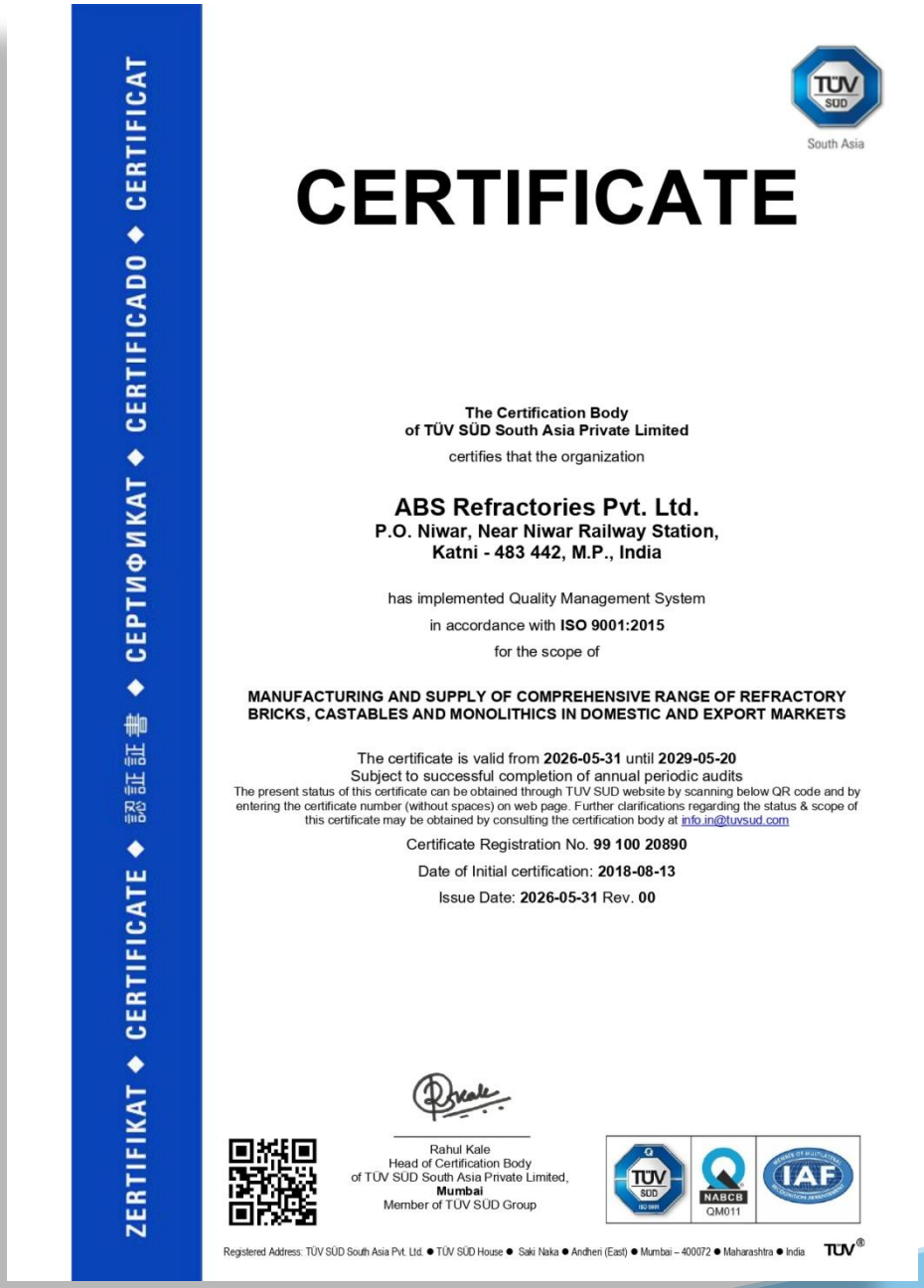
Quality Policy

We are committed to manufacture and supply high quality yet economical products to all our customers. With our teamwork we go all out to meet our customer's requirements by attaining excellence at all levels of production activities. By stringently adhering to quality norms we lead to continuous improvement of products, process costs, effectiveness and productivity. All quality control procedures and developmental testings are carried out by Ceramic Engineers in our fully equipped Laboratory.

Our success over the years has been built on the principles of Quality, Service and Reliability.

We have the ISO 9001:2000 certificate by TUV SUD Management Services, GmbH Since 2004.

ISO 9001:2015



ZERTIFIKAT ◆ CERTIFICATE ◆ 認証証書 ◆ СЕРТИФИКАТ ◆ CERTIFICADO ◆ CERTIFICAT

TÜV SÜD South Asia

CERTIFICATE

The Certification Body
of TÜV SÜD South Asia Private Limited

certifies that the organization

ABS Refractories Pvt. Ltd.
P.O. Niwar, Near Niwar Railway Station,
Katni - 483 442, M.P., India

has implemented Quality Management System

in accordance with **ISO 9001:2015**

for the scope of

MANUFACTURING AND SUPPLY OF COMPREHENSIVE RANGE OF REFRACTORY BRICKS, CASTABLES AND MONOLITHICS IN DOMESTIC AND EXPORT MARKETS

The certificate is valid from **2026-05-31** until **2029-05-20**
Subject to successful completion of annual periodic audits

The present status of this certificate can be obtained through TUV SUD website by scanning below QR code and by entering the certificate number (without spaces) on web page. Further clarifications regarding the status & scope of this certificate may be obtained by consulting the certification body at info.in@tuvsud.com

Certificate Registration No. **99 100 20890**

Date of Initial certification: **2018-08-13**

Issue Date: **2026-05-31** Rev. **00**

Rahul Kale
Head of Certification Body
of TÜV SÜD South Asia Private Limited,
Mumbai
Member of TÜV SÜD Group

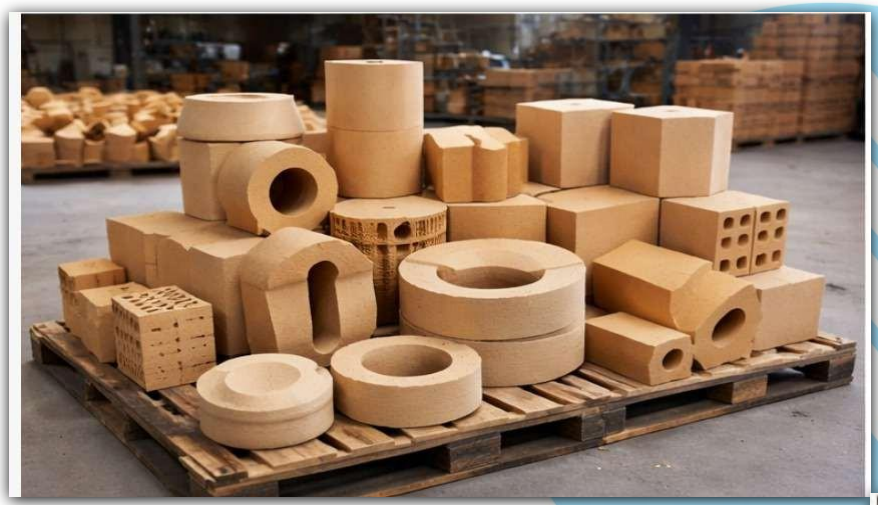
QM011

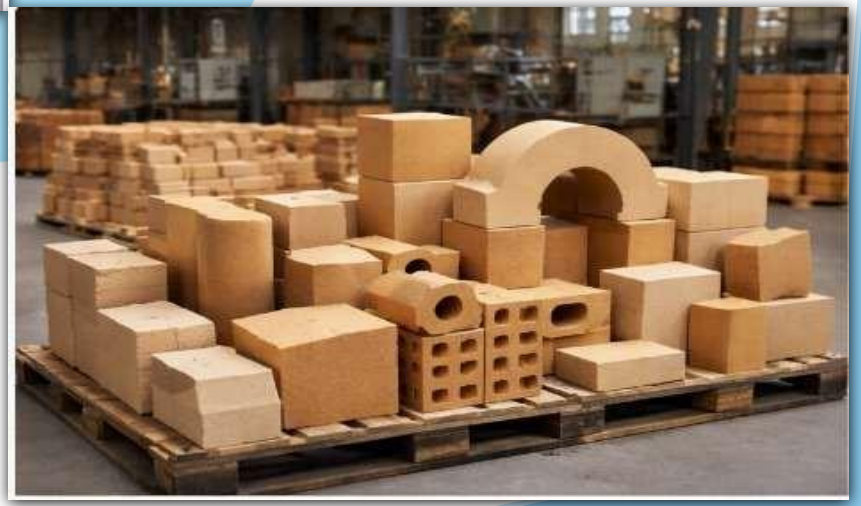
Registered Address: TÜV SÜD South Asia Pvt. Ltd. ● TÜV SÜD House ● Saki Naka ● Andheri (East) ● Mumbai – 400072 ● Maharashtra ● India

ABS Refractories –Product Range

- Fireclay and High Alumina Bricks (32-90% Alumina)
- Hot and Cold Face Insulation Bricks
- High Temperature Insulation Bricks (IFB 23 to IFB 30 Grade)
- Acid Resistant Bricks (Grade I & II)
- Dense Conventional Alumina Castables
- Insulation Castables
- Low Cement Castables
- Ultra Low Cement Castables
- Refractory Bed Supports (High, Medium & Low Purity)

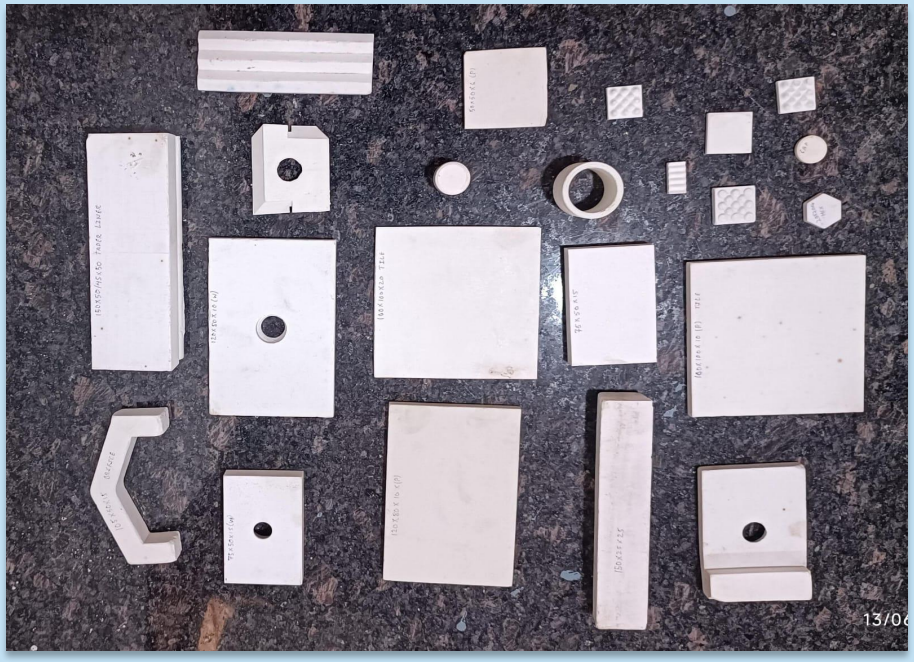
ABS Refractories
Fired Shaped Products

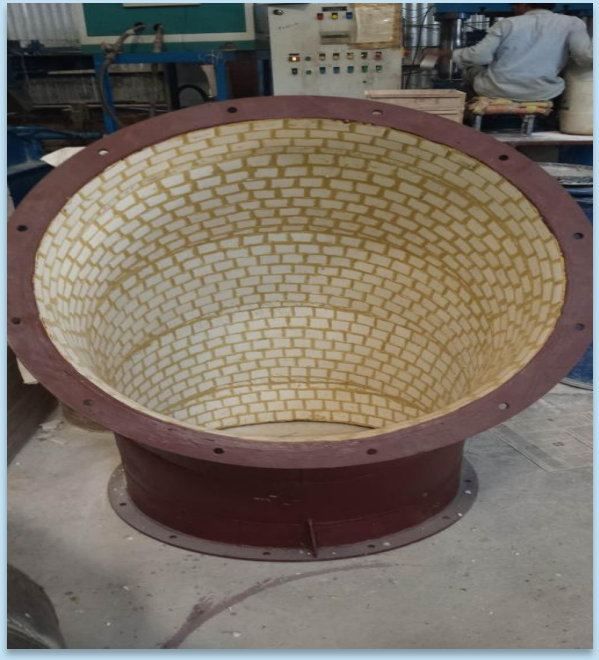




Complete Range Of Technical Ceramics

92-94% Alumina regular products- Ball Mill liners, Wear Resistant Liners , Dimple Tiles, Grinding Media, etc





Major Products

- Fireclay and High Alumina Bricks(32-95% Al_2O_3)
- Hot Face and Cold Face Insulation Bricks
- Acid Resistant Bricks (Grade I&II)
- Dense Alumina Castables (40-90%Al_2O_3)
- Insulation Castables
- Self-flow Castables
- Ultra Low and Low Cement Castables
- Refractory Bed Supports(High, Medium & Low purity)
- Alumina Ramming Masses (55-85%Al_2O_3)
- Basic Ramming Masses(55-90%MgO)
- Basic Gunning Masses

Special Products

- 85% Phosphate bonded Al_2O_3 Bricks for Aluminum Holding Furnaces
- Zirconia/Sillimanite/Mullite based Bricks for Glass Plants
- AFC Plastic Masses

Fire Clay & High Alumina Bricks

BRAND	ABS/F36	ABS/F40	ABS/HA42 D	ABS/45	ABS/HA/45	ABS/HA55	ABS/HA59	ABS/HA62
Al_2O_3min	35 %	40 %	42 %	45 %	45 %	55 %	59 %	62 %
Fe_2O_3max	3 %	2.5 %	1.5 %	3.5 %	2 %	3.5 %	4 %	1.5 %
BD(g/cc)	2.15 min	2.20 min	2.25 min	2.25 min	2.25 min	2.40 min	2.45 min	2.50 min
AP	22% max	22% max	18% max	22% max	21% max	23% max	23% max	18% max
CCS (Kg/cm^2)	350 min	350 min	500 min	400 min	350 min	450 min	450 min	600 min
PLCR(%) max.	±1 at 1350^oC/3hr	±0.80 at 1450^oC/3hr	±0.5 at 1450^oC/3hr	±1 at 1400^oC/3hr	±0.80 at 1450^oC/3hr	±1.5 at 1450^oC/3hr	±1.5 at 1450^oC/3hr	±0.50 at 1500^oC/2hr
RUL (Ta)(min.)	1350°C	1450°C	1480°C	1400°C	1450°C	1420°C	1440°C	1500°C
PCE Orton	31(1683°C) min.	33(1743°C) min.	34(1763°C) min.	32(1717°C) min.	33(1743°C) min.	34(1763°C) min.	34(1763°C) min.	36(1804°C) min.

Fire Clay & High Alumina Bricks

BRAND	ABS/HA70	ABS/CE70	ABS/HA70	ABS/HA80	ABS/PH85	ABS/HA88	ABS/HA90	ABS/HA95
Al_2O_3min	70 %	70 %	70 %	79 %	85 %	88 %	90 %	95 %
Fe_2O_3max	3 %	1.5 %	2.5 %	1.5 %	1.5 %	1.20 %	1.30 %	0.30 %
P_2O_5					1.5 % min.			
BD(g/cc)	2.60 min	2.55 min	2.53 min	2.70 min	2.75 min	2.80 min	2.90 min	3.00 min
AP	23% max	22% max	23% max	18% max	18% max	18% max	18% max	18% max
CCS (Kg/cm^2)	600 min	600 min	600 min	750 min	750 min	750 min	800 min	600 min
PLCR(%) max.	±2 at 1500°C/2hr	±2 at 1500°C/2hr	±2 at 1500°C/2hr	±1 at 1500°C/2hr	±1 at 1550°C/2hr	±1 at 1550°C/2hr	±0.60 at 1550°C/2hr	±0.50 at 1600°C/2hr
RUL (Ta) min.	1460°C	1500°C	1480°C	1540°C	1540°C	1560°C	1580°C	1650°C
PCE Orton	+37(1820°C) min.	+37(1820°C) min.	+37(1820°C) min	37(1820°°C) min	37(1820°C) min	37(1820°C) min	38(1835°C) min	38(1835°C) min

Insulating Bricks

BRAND	ABS/HFK-45	ABS/HFK-60	ABS/HFK-75
Al2O3min	45 %	60 %	72.75 %
Fe_2O_3max	2 %	1 %	0.50 %
BD(g/cc)	2.25 max	2.45 max	2.55 max
CCS(Kg/cm^2)	350 min	600 min	600 min
PLCR(%)	±0.80 at 1450°C/3hr	±0.50 at 1600°C/2hr	±0.30 at 1600°C/2hr
PCE(Orton)	33(1743°C)		
Thermal Conductivity Kcal/m/hr/°C)at 800°C	0.97 Kcal/m/hr/°C	1.23 Kcal/m/hr/°C	1.24 Kcal/m/hr/°C
Max Service Temp	1450°C	1650°C	1650°C

Acid Resistance Bricks

BRAND	ABS/AR-I	ABS/AR-II
Al_2O_3 max	20-30 %	20-30 % min.
Fe_2O_3 max	1.5 %	1.5 %
SiO_2 min	60-70 %	60 % to 70 %
Flexural strength (Kg/cm^2)	75 min	70 min
CCS(Kg/cm^2)	750 min	500 min
Resistance to acid	1.5 %	4 %
Water absorption(%)	2% max	3% max

Dense Alumina Castable

BRAND	ABS/FRS40	ABS/FRS45	ABS/FRS70	ABS/WK-50	ABS/WC-60	ABS/WA-90
Al2O3 min	40 %	45 %	70 %	50 %	60 %	90 %
Fe2O3 max	4.00 %	4.00 %	5.00 %	1.50 %	1.00 %	0.80 %
BD(g/cc) (110^{O}C/24hrs)	2.10 min	2.20 min	2.50 min	2.10 min	2.20min	2.75 min
CCS(Kg/cm2) (110^{O}C/24hrs)	250 min	400 min	350 min	350 min	350 min	600 min
(800^{O}C/24hrs)				280 min	280 min	430 min
(1100^{O}C/3 hrs)			450 min	220 min	230 min	330 min
(1500^{O}C/3hrs)				500 min	520 min	650 min
PLCR	±1.00%	±1.00%	±1.00%	±1.00%	±1.5%	±1.00%
Max Service Temp	1300^{O}C	1400^{O}C	1450^{O}C	1500^{O}C	1600^{O}C	1750^{O}C
Max Grain Size	5 mm	5 mm	5 mm	5 mm	5 mm	5 mm
PCE (Orton)	20	23	31(1683^{O}C)min	30(1665^{O}C)min.	31(1683^{O}C)min.	37(1820^{O}C)min.

Insulating Castable

BRAND	ABS/IC-33	ABS/IC 35	ABS/IC 40	ABS/IC 41	ABS/IC 43	ABS/IC 44	ABS/IC 45
Al_2O_3 min	33.0 %	35.0 %	40.0 %	41.0 %	43.0 %	44.0 %	45.0 %
Fe_2O_3 max	8.5 %	3.5 %	3.5 %	2 %	1.5 %	1.5 %	1.5 %
BD(g/cc)(110°C/ 24hr)	0.85 max	1.25 max	1.60 max	1.20 max	1.25 max	1.50 max	1.60 max
CCS(Kg/cm²) (110°C/24hr)	12 min	35 min	80 min	30 min	45 min	80 min	110 min
(800°C/3 hr)	4 min	25 min	60 min	25 min	30 min	40 min	65 min
(1100°C/3 hrs)	6 min	25 min	60 min	25 min	30 min	40 min	65 min
(1350°C/3hrs)		40 min	70 min	35 min	50 min	45 min	80 min
PLCR (1350°C/3 hrs)	±1.0%	±1%	±1.0%	±1%	±0.90%	±0.08%	±0.60%
Thermal Conductivity(Kcal/ m/hr/°C) at 800°C	0.19	0.32	0.45	0.35	0.40	0.45	0.50
Max Service Temp	1100°C	1300°C	1350°C	1350°C	1350°C	1400°C	1400°C
Max Grain Size	5 mm	5 mm	5 mm	5 mm	5 mm	5 mm	5 mm
PCE (Orton)	14	14	16	16	16	16	15

Self Flow Castables

BRAND	ABS/SF-45	ABS/SF-70
Al_2O_3 min	43%	68%
Fe_2O_3 max	1.00%	1.5%
BD(g/cc)(110°C/24hr)	2.20 min	2.60 min
CCS(Kg/cm²) (110°C/24hr)	250 min	300 min
(1100°C/3 hr)	500 min	750 min
(1550°C/3hr)	700 min	800 min
PLCAR (1550°C/3 hr)	±1.00%	±0.80%
PLCAR (1550°C/3 hr)	±1.00%	±0.80%
Max Service Temp	1550°C	1600°C
Max Grain Size	6 mm	6 mm
PCE (Orton)	32(1717°C) min.	36(1804°C) min.

Ultra Low Cement Castables

BRAND	ABS/ULC-45	ABS/ULC-2K 60	ABS/ULC-MR-70	ABS/ULC-M-80
Al_2O_3 min	45 %	60 %	70 %	80 %
Fe_2O_3 max	1.00 %	1.50 %	1.50 %	1.80 %
BD(g/cc)(110°C/24hr)	2.35 min	2.60 min	2.70 min	2.90 min
CCS(Kg/cm^2) (110°C/24hr)	375 min	400 min	425 min	450 min
(800°C/3 hr)	800 min	800 min	800 min	800 min
(1100°C/3 hr)	825 min	825 min	900 min	1000 min
(1500°C/3hr)	900 min	900 min	1000 min	1200 min
PLCAR (1500°C/3 hr)	±0.70% max	±0.70 %	±0.70 %	±0.80 % max
Max Service Temp	1550°C	1600°C	1650°C	1700°C
Max Grain Size	6 mm	6 mm	6 mm	6 mm
PCE (Orton)	32(1717°C)	36(1804°C)	36(1804°C)	37(1820°C)
Feature & Setting	Ultra Low Cement	Ultra Low Cement	Ultra Low Cement	Ultra Low Cement
	Hydraulic	Hydraulic	Hydraulic	Hydraulic
Installation technique	Vibration casting	Vibration casting	Vibration casting	Vibration casting

Low Cement Castables

BRAND	ABS/LC-45	ABS/LC-60	ABS/LC-70	ABS/LC-70M	ABS/LC-80	ABS/LC-90
Al_2O_3 min	45%	58%	70%	70%	80%	90%
Fe_2O_3 max	2%	1.00%	0.08%	0.5%	1.80%	1.00%
BD(g/cc)(110°C/24hr)	2.20 min	2.55 min	2.70 min	2.60 min	2.90 min	3.00 min
CCS(Kg/cm^2) (110°C/24hr)	500 min	750 min	700 min	700 min	800 min	950 min
(800°C/3 hr)	600 min	800 min	800 min	800 min	900 min	1000 min
(1100°C/3 hr)	700 min	900 min	900 min	900 min	1000 min	1100 min
(1500°C/3hr)	900 min	1000 min	1000 min	1100 min	1200 min	1200 min
(1500°C/3hr)	900 min	1000 min	1000 min	1100 min	1200 min	1200 min
PLCAR (1400°C/3 hr)	±1.00%	±0.80%	±0.70%	±0.60%	±0.80%	±0.80%
Max Service Temp at	1450°C	1600°C	1650°C	1700°C	1700°C	1700°C
Max Grain Size	6 mm	6 mm	6 mm	6 mm	6 mm	6 mm
PCE (Orton)	32	36(1804°C)	36(1804°C)	37(1820°C)	37(1820°C)	37(1820°C)
Feature	Low Cement	Low Cement	Low Cement	Low Cement	Low Cement	Low Cement
Setting	Hydraulic	Hydraulic	Hydraulic	Hydraulic	Hydraulic	Hydraulic

Refractory Bed Support (High Purity)

BRAND	ABS/HAB	ABS/HAB	ABS/HAB	ABS/HAB	ABS/HAB	ABS/HAB	ABS/HAB
Al_2O_3 min	99 %	99 %	99 %	99 %	99%	99 %	99 %
Fe_2O_3 max	0.30 %	0.30 %	0.30 %	0.30 %	0.30 %	0.30 %	0.30 %
Individual Ball density(Kg/lit)	3.20 min	3.20 min	3.20 min	3.20 min	3.20 min	3.20 min	3.20 min
Apparent Porosity (%)	10 max	10 max	10 max	10 max	10 max	10 max	10 max
Water absorption (%)	4 max	4 max	4 max	4 max	4 max	4 max	4 max
Nominal size (mm)	3	6	13	19	25	37	50
Size range (mm)	2-4	5-7	11-15	17-21	23-27	35-39	47-53
Bulk Density (Kg/lit) min	1.85	1.85	1.80	1.80	1.70	1.65	1.65
Point load (Kg) min	75	150	400	800	1000	1500	2000
Max Service Temp	1800°C						
PCE (Orton)	38 (1835°C)						

Refractory Bed Support (Medium Purity)

BRAND	ABS/MAB	ABS/MAB	ABS/MAB	ABS/MAB
Al_2O_3	45-50%	45-50%	45-50%	45-50%
Fe_2O_3 max	2%	2%	2%	2%
Apparent Porosity (%)	12 max	12 max	12 max	12 max
Water absorption (%)	4 max	4 max	4 max	4 max
Nominal size (mm)	3	5	13	19
Size range (mm)	2-4	5-7	11-15	17-21
Max Service Temp	1400°C			
PCE (Orton)	32			

Refractory Bed Support (Low Purity)

BRAND	ABS/LAB	ABS/LAB	ABS/LAB
Al_2O_3	30%	30%	30%
Fe_2O_3 max	2%	2%	2%
Apparent Porosity (%)	2 max	2 max	2 max
Water absorption (%)	0.5 to 1 max	0.5 to 1 max	0.5 to 1 max
Nominal size (mm)	13	19	25
Size range (mm)	11-15	17-21	23-27
Max Service Temp	1300°C		
PCE (Orton)	23		

Major Raw Material Used

Depending on the type and nature of product we use a wide variety of raw materials. Some of the major raw materials are:

- **White Fused Alumina**
- **Calcined Alumina**
- **Technical Alumina**
- **Calcined Bauxite**
- **Calcined Diaspore**
- **Reactive Alumina**
- **Calcined Pyrophillite**
- **Quartz powder**

Major Customer

calderys

TATA STEEL

BHEL

NTPC

Rail Wheel Factory
Yelahanka, Bangalore

BIRLA CORPORATION LIMITED

IndianOil

vedanta

ARTSON ENGINEERING LIMITED
(A subsidiary of TATA PROJECTS LIMITED)

सीसीआई
CCI

Tamilnadu Cements Corporation Limited

HEIDELBERGCEMENT

THERMAX
Sustainable solutions
Energy & Environment

ISGEC
ISGEC HEAVY ENGINEERING LTD.

uttamenergy

thyssenkrupp

Thank you

CONNECT WITH US

WEBSITE

www.absrefractories.com

EMAIL

info@absrefractories.com
ankur@mittalgroup.co
vijjaymittal@mittal-group.com