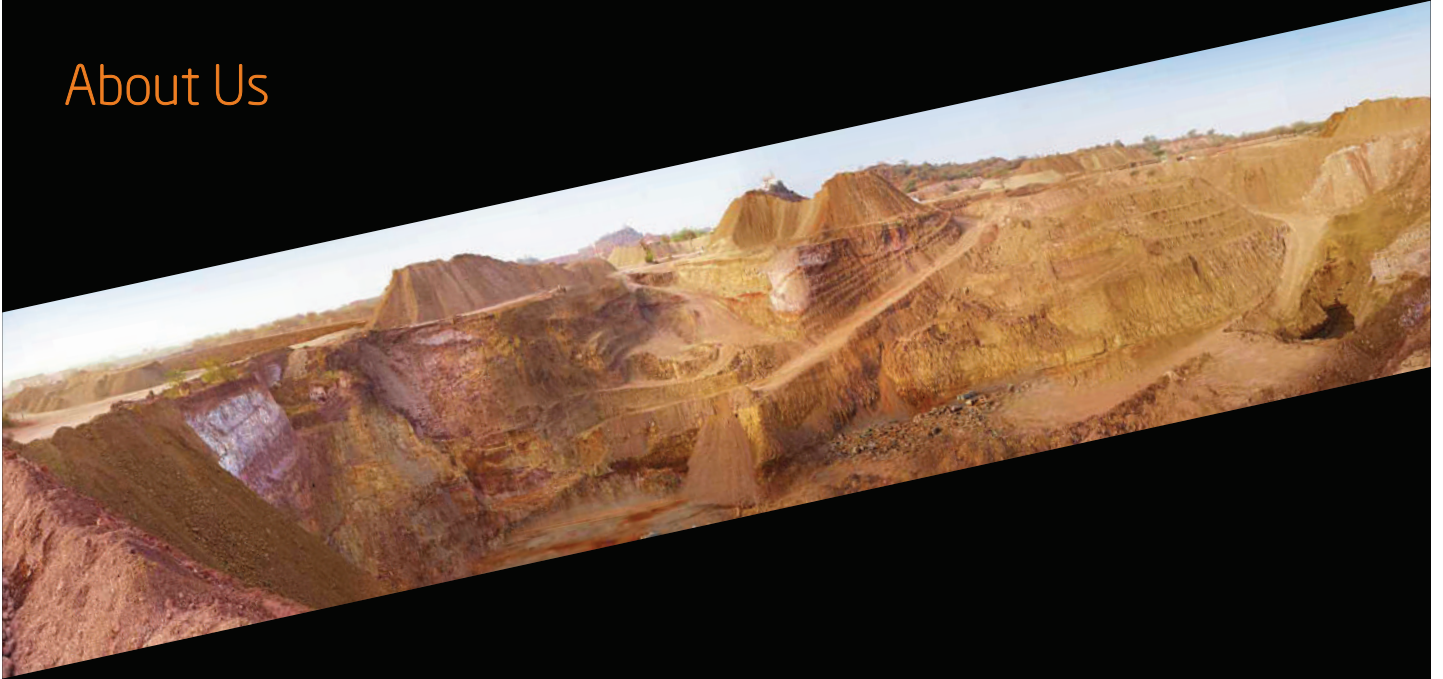


# ALUMINA BASED HIGH PERFORMANCE MONOLITHICS



**Orient Abrasives Ltd**  
Associate Company of Ashapura Group

## About Us



- Established in 1960, Ashapura Group is India's Premier Mining & Mineral Processing company having large captive Resources
- With Sales over 10 million tonnes of ores and processed minerals having a revenue of more than US \$ 500 million
- With strength of 2800 employees spanning over the globe
- Monolithic production capacity of 40,000 TPA
- Exporting to more than 70 countries across the globe
- State-of-the-art Research & Development centre





## Monolithics For Diverse Industries

Steel



Cement



Foundry



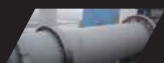
Ferroalloys



Power Plant



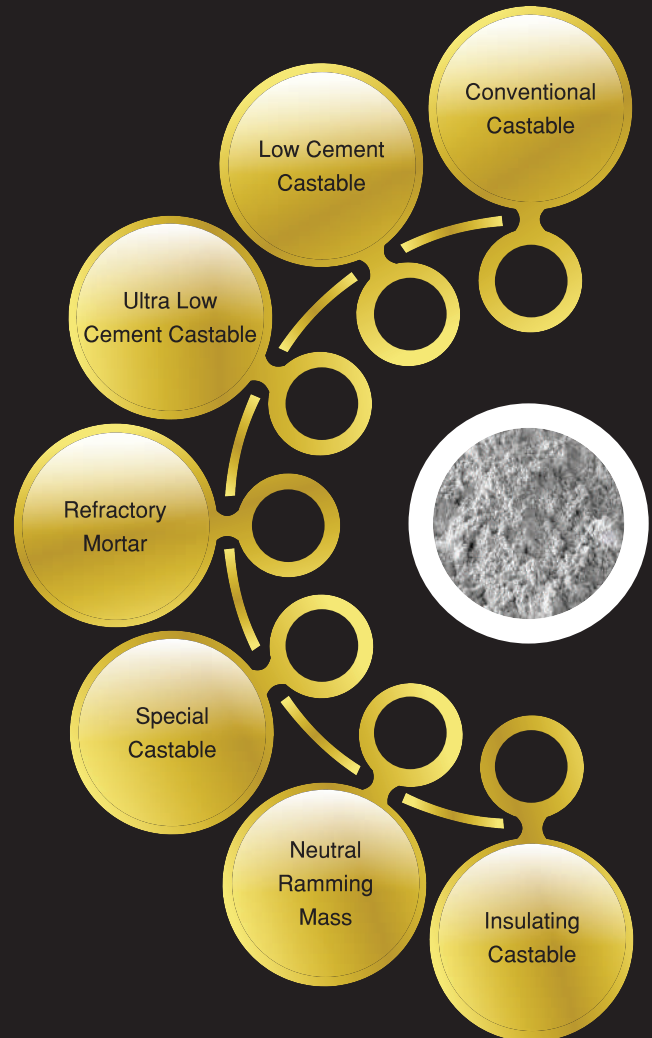
Sponge Iron



Reheat Furnace



## Products



# Recommendations

## Steel

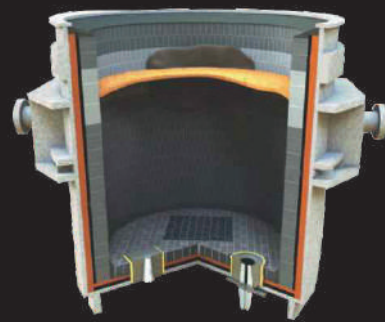
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### Electric Arc Furnace

Roof Delta ASHHEAT A

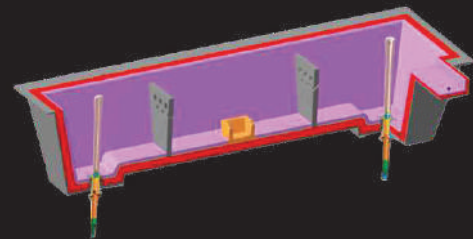
### Ladle

Ladle Roof Delta ASHHEAT A  
Ladle Backup ASHMON 70 / ASHMON 70Li / 80Li  
Ladle cover ASHHEAT A / ASHHEAT K  
Ladle Patching Mass ASHHEAT A SPECIAL  
Well-block fixing mass ASHCAST 95  
Free board ASHHEAT K  
Ladle Lip Lining ASHHEAT A  
Slag Zone ASHHEAT A  
Impact Area ASHHEAT A / ASHMON 90 /  
ASHCAST95



### Tundish

Tundish Backup Lining ASHMON 70  
Tundish backup Patching mass ASHHEAT A SPECIAL  
Tundish Pad, Striker & Pad ASHMON 80 / ASHMON 90  
Tundish Cover ASHHEAT K



### Reheating Furnace

Hearth (Pusher Type) ASHMON 90  
Moving Hearth Furnace ASHMON 70 / ASHMON 80  
Hearth Walking beam Furnace ASHMON 70  
Burner zone Skid & Pipe ASHMON 70  
Inclined Burner wall ASHMON 70



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\* General recommendations are offered for reference purpose only, depending upon the application area, application temperature & critical parameters, recommendations may vary.

## Ferrous Foundry

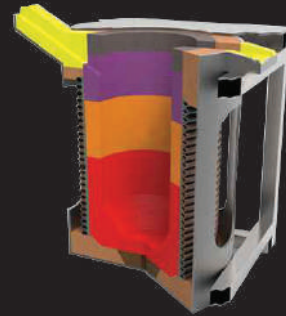
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### Induction Furnace

Induction Furnace main bath	ASHMON 80
Channel Induction Furnace roof	ASHHEAT A / ASHHEAT K / ASHMON 45

### Furnace

Pusher, Walking beam furnace, Rotary Hearth Furnace	ASHHEAT A
Holding Furnace	ASHCAST 95



## Non Ferrous Foundry

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### Ladle

Ladle Lining	ASHHEAT A / ASHMON 80
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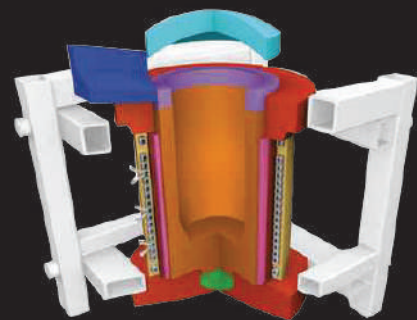
### Induction Furnace

Coreless channel induction furnace	ASHHEAT A / ASHMON 90
Induction Furnace- Channel or coreless upper case	ASHCAST 95
Melting and holding furnace (Main body and Inductor)	NRM / TABCAST 97
Furnace cover	ASHHEAT A



### Reverberatory Furnace

Reverberatory Furnace	ASHHEAT A / ASHCAST 95
Reverberatory Furnace wall	ASHHEAT A



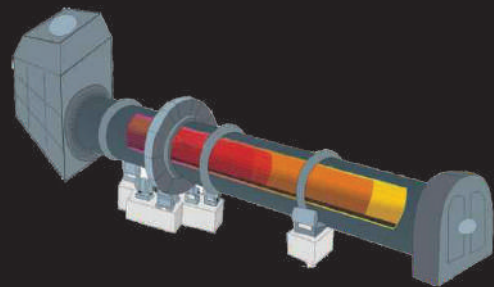
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## Sponge Iron

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### Kiln

After Burning Chamber	ASHHEAT K
Dust settling Chamber	ASHHEAT K
Rotary Kiln & Transfer Chute	ASHMON 80
Cooler	ASHMON 80 / ASHMON 60



## Power

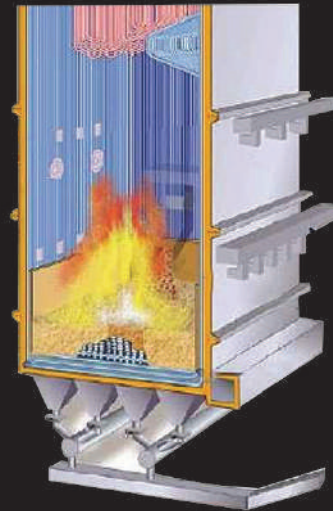
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### Boiler Chamber

Fluidised bed Catalytic Boiler	ASHMON 45 / ASHMON 60
Heat Recovery Steam Generator	ASHMON 60 / ASHHEAT K
Tube Boiler	ASHHEAT K / ASHHEAT A
Radiant Boiler	ASHHEAT K / ASHMON 45

### Firing Chamber

Firetube boiler	ASHHEAT K
Wood Fired boiler	ASHHEAT C / ASHCRETE SUPER
Grate fired chamber furnace	ASHHEAT K / ASHMON 45
Coal dust fired boiler	ASHHEAT K



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\* General recommendations are offered for reference purpose only, depending upon the application area, application temperature & critical parameters, recommendations may vary.

# Products

## Special Castables

Product	Al <sub>2</sub> O <sub>3</sub> (%)	CCS (Kg/cm <sup>2</sup> )		Maximum Service Temperature (°C)
		110 (°C) / 24 hrs	1100 (°C) / 3 hrs	
ASHCAST 97	95 - 97	350-500	260-400	1850
ASHCAST 95	93 - 95	440-610	270-400	1850

## High Purity Dense Castables

Product	Al <sub>2</sub> O <sub>3</sub> (%)	CCS (Kg/cm <sup>2</sup> )		Maximum Service Temperature (°C)
		110 (°C) / 24 hrs	1100 (°C) / 3 hrs	
ASHHEAT A	85 - 90	600 - 700	300 - 430	1700
ASHHEAT M	78 - 81	500 - 600	300 - 400	1700
ASHHEAT K	56 - 60	350 - 450	190 - 300	1600
ASHHEAT C	48 - 52	350 - 440	175 - 300	1500

## Medium Purity Dense Castables

Product	Al <sub>2</sub> O <sub>3</sub> (%)	CCS (Kg/cm <sup>2</sup> )		Maximum Service Temperature (°C)
		110 (°C) / 24 hrs	1100 (°C) / 3 hrs	
ASHCRETE SUPER	68 - 71	350 - 470	175 - 190	1450
ASHCRETE NORMAL	42 - 47	250 - 360	140 - 200	1400
ASHCRETE SPECIAL	44 - 47	400 - 480	190 - 290	1350
ASHCRETE (LT)ASH	30	250 - 350		800
THERMOCRETE NORMAL	35	180 - 280		1000

Packing available in 25 Kg/ 50 Kg HDPE/ Paper bag & Jumbo bag.

# Products

## Mortars

Product	Al <sub>2</sub> O <sub>3</sub> (%)	Grain Size (mm)	Maximum Service Temperature (°C)
90 AM	85 - 89	0 - 0.5	1800
70 AM	65 - 70	0 - 1	1600
60 AM	55 - 60	0 - 1	1450
50 N	45 - 50	0 - 1.5	1450
50 F	45 - 50	0 - 1.0	1450

## Neutral Ramming Mass

Product	Al <sub>2</sub> O <sub>3</sub> (%)	Grain Size (mm)	Initial Sintering Temperature (°C)	Maximum Service Temperature (°C)
ASH NRM 85	85 - 88	0 - 5	1200	1820

## Insulating Castable

Product	Fe <sub>2</sub> O <sub>3</sub> (%)	CCS (Kg / cm <sup>2</sup> )		Maximum Service Temperature (°C)
		110°C / 24 hrs	1100°C / 3 hrs	
ASHINSULITE 7	8 - 9	12 - 16	6 - 8	1100
ASHINSULITE 9	6 - 7	15 - 20	10 - 14	1100
ASHINSULITE 9HS	3 - 4	20 - 25	15 - 20	1100
ASHINSULITE 11	3.5 - 4.5	50 - 60	30 - 40	1350
ASHINSULITE 13	3.5 - 4.5	90 - 100	60 - 70	1350
ASHINSULITE 15	3.2 - 4.2	90 - 100	60 - 70	1350

\* Mortar - As per requirement, Air setting and ceramic setting mortars are available, including chrome base.

Packing available in 25 Kg/ 50 Kg HDPE/ Paper bag & Jumbo bag.



# Products

## Low Cement Castables

Product	Al <sub>2</sub> O <sub>3</sub> (%)	CCS (Kg/cm <sup>2</sup> )		Maximum Service Temperature (°C)
		110 (°C) / 24 hrs	1100 (°C) / 3 hrs	
ASHMON 95	92 - 95	800 - 1100	1060 - 1170	1800
ASHMON 90	87 - 90	800 - 1050	930 - 1240	1700
ASHMON 80	78 - 81	720 - 860	860 - 1050	1700
ASHMON 70 LI	69 - 72	700 - 800	800 - 950	1650
ASHMON 70	68 - 71	610 - 820	700 - 930	1600
ASHMON 60	57 - 61	650 - 780	800 - 900	1600
ASHMON 45	45 - 47	600 - 700	800 - 900	1550
ASHMON CRC	35 - 45	600 - 700	700 - 800	1500

## High Abrasion Resistance Castable

Product	Al <sub>2</sub> O <sub>3</sub> (%)	Grain Size (mm)	CCS (Kg/cm <sup>2</sup> ) 1450 (°C)
ASHMON 75 ABR	75	0 - 8	1500

Packing available in 25 Kg/ 50 Kg HDPE/ Paper bag & Jumbo bag.

## Why Us ?

- Largest Mine owner with reserves of over 100 Million Tons
- In house high quality raw materials
- Consistent quality with proven performance in industries
- Customize products for traditional and niche applications
- World Wide Distribution Network
- Pre and Post order Technical support
- Continuous improvement with support of R & D team
- Complete Supply Chain Management
- Experienced Dedicated, Focussed Customer Centric team



## R & D Capabilities

- With a campus of over 11 acres, The largest and the most well equipped Research & Development Centre for mineral analysis and development in India
- Developed several new applications/process improvements over the years
- State-of-the-art analytical and processing equipment facility
- Integrated pilot plant facility
- Group of Scientists and Engineers from various scientific fields
- High Tech equipment's viz. XRF, Spectrophotometer, Flame Photometer, Magnetic Analyser, CCS machine, Vicat Apparatus, Blane Apparatus, Sieve Shaker to determine the various properties of the product
- Physical lab equipment's Thermal Conductivity Appratus, MOR machine, HMOR machine (1450 C) , PLC Furnace ( 1600 C), PCE furnace ( 1850 C), High Temperature Furnace (1600 C), Humidity chamber, Muffle furnace, CCS Machine

## Technical Service

- To provide technical recommendations based on the applications.
- To provide supervision for regular maintenance / major shutdown
- To undertake projects based supply and application jobs



## Integrated Supply Chain



# Presence in India



Ceramic Clays



Bentonite,  
Calcined clays and  
Bleaching Clay



Marketing Office  
New Delhi



Bauxite, Calcined  
Bauxite and  
Fused Alumina



Global HQ  
Mumbai



Bauxite and  
Silica Sand



Kaolin



Bauxite



Attapulgate and  
Thermal Activated  
Bleaching Clay



Barytes (non-captive)



## Global Presence



## Group Companies

Ashapura International Limited

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Ashapura Perfoclay limited

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Bombay Minerals Limited

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Ashapura Minechem (Mumbai, India)

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Ashapura Minechem Limited (UAE) FZE

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Orient Abrasives Limited

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Ashapura Midgulf NV (Belgium)

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Sohar Ashapura Chemicals LLC (Oman)

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Ashapura Far East SDN. BHD (Malaysia)

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PT Ashapura Resources (Indonesia)

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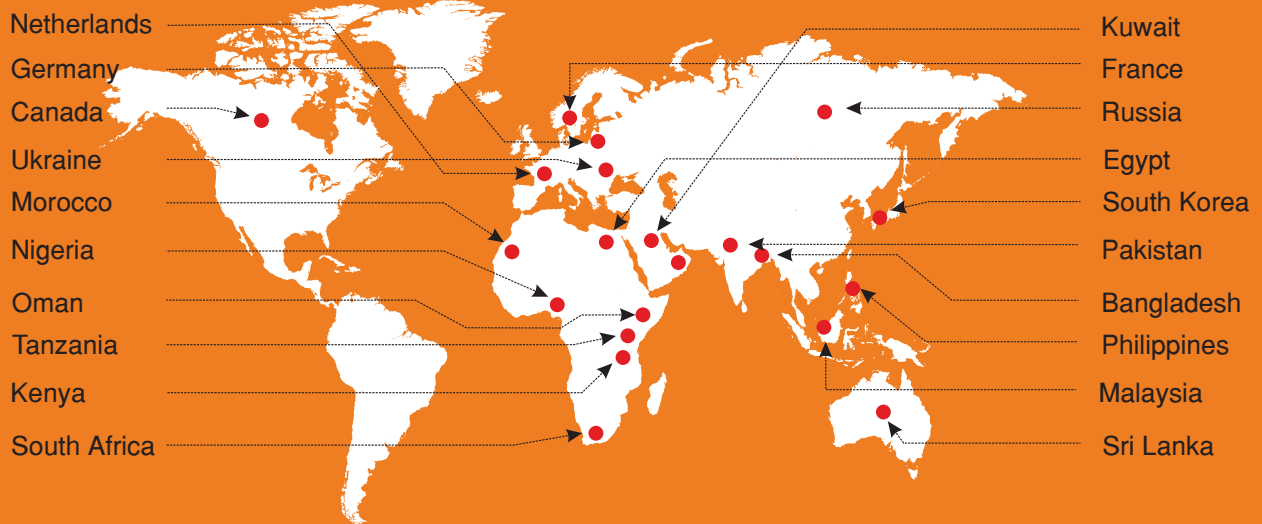
Ashapura Minechem (China)

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Ashapura Minechem (South Korea)

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# Global Clientele



## Indian Clientele





**ASHAPURA**  
Group of Industries



**Orient Abrasives Ltd**  
Associate Company of Ashapura Group

**CORPORATE OFFICE**

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