



**PACIFIC**  
REFRACTORIES

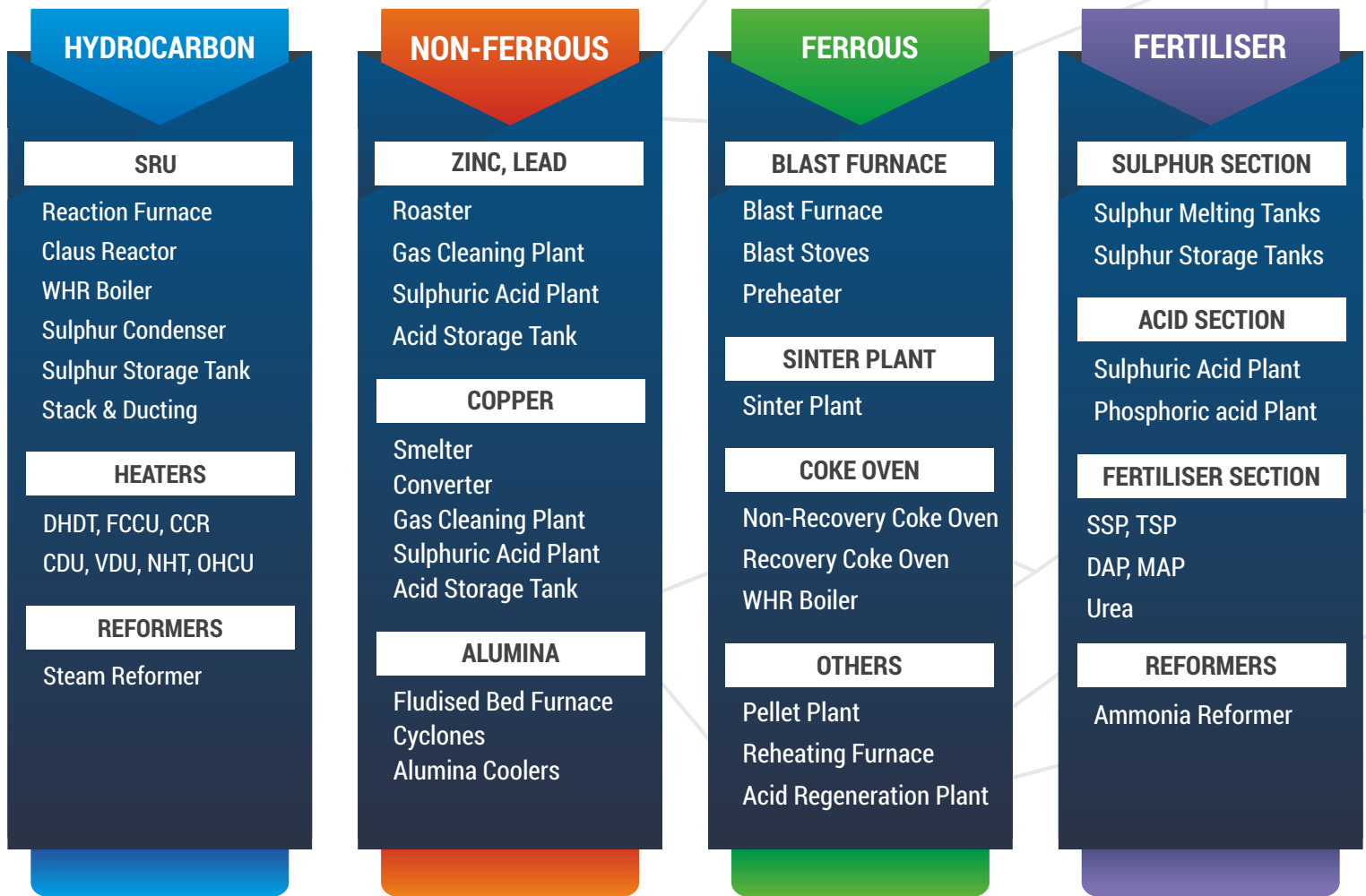
Total Refractory Expertise

**HYDROCARBON | NON-FERROUS | FERROUS | FERTILISER | CEMENT | CHEMICAL | POWER**

**PACIFIC REFRACTORIES** is a premium quality refractory manufacturer. It was established in 1994. Today, PRL has two manufacturing plants with laboratory facilities adopting ASTM and ISO standards for inspection and testing of products. The plants are ISO 9001:2008 certified.

With a view to diversify the product range, the company went into a technical collaboration with *Premier Refractories, USA* for manufacturing high grade alumina castables, low cement castables, ramming mass, plastics, high strength mortars, pre-cast shapes etc.

PRL has successfully produced and marketed its products for use in hydrocarbon, ferrous, non-ferrous, chemical, cement and other sectors. The products are also enlisted with leading consultants like Engineers India Ltd and MECON Ltd for supply and application of products.



# PRODUCT RANGE

## BINDERS

High Alumina Calcium Aluminate Binders

## CASTABLES

Low Cement Castables

High Purity Dense Castables

Insulating Castables (Low / Medium Iron)

Plastic Refractory

Pre-Cast Pre-Fired Blocks

Ultra Low Cement Castables

Medium Purity Dense Castables

Self Flow Castables

Ramming Masses

Non Wetting Castables (for Aluminium Industry)

## BRICKS

Special Insulating Bricks

Dense Fire Bricks (Medium Iron)

Silica Insulating Bricks

Conventional Insulating Bricks

Dense Fire Bricks (Low Iron)

## MORTARS

High Strength Mortars (for Dense Bricks)

Mortars (for Insulating Bricks)

## SPECIAL MATERIALS

Wear Resistant Castable

Silicon Carbide based

## ACID RESISTANT MATERIALS

Acid Resistant Bricks

Acid Resistant Castables

Acid Resistant Mortars

Carbon & Graphite Bricks

## PACCEM™

(High Alumina Calcium Aluminate Binders)

PACCEM SUPER is a high purity hydraulic binder developed for use at high temperatures. It develops excellent mechanical strength in Super Refractory castables.

Calcium Aluminate Binder

PACCEM SUPER

### Low Cement Castables

BD – 2.3 to 3  
CCS: upto 1200 kg/cm<sup>2</sup>  
Service Temp.: upto 1700 °C

PACMON LC-45  
PACMON LC-60  
PACMON LC-70  
PACMON LC-80  
PACMON LC-90  
PACMON LC-60 AS

PACMON WR

### Ultra Low Cement Castables

BD – 2.3 to 3  
CCS: upto 1200 kg/cm<sup>2</sup>  
Service Temp.: upto 1700 °C

PACMON ULC-60  
PACMON ULC-70  
PACMON ULC-80  
PACMON ULC-90

## PACMON™

(High Strength & Abrasion Resistant Low / Ultra Low Cement Castables)

- The range of Low Cement / Ultra Low Cement Castables are ideal for applications requiring superior erosion resistance and volume stability.
- These are available with high density, lower porosity and higher crushing strengths at all temperatures.

## PACFLOW™

(High Strength & Abrasion Resistant Self Flow Castables)

- PACFLOW are self flowing castables which can be applied by pouring or pumping to fill moulds or form work without vibration.
- They have low porosity, higher service temperatures & improved thermal shock resistance.
- Ideal for quick installation in complicated locations as the material flows without the help of vibrations.

### Self Flow Castables

BD – 2.3 to 3  
CCS: upto 1000 kg/cm<sup>2</sup>  
Service Temp.: upto 1700 °C

PACFLOW-45  
PACFLOW-60  
PACFLOW-70  
PACFLOW-80  
PACFLOW-90

<p><b>High Purity Dense Castables</b></p> <p>BD – 2.1 to 2.75          CCS: upto 680 kg/cm<sup>2</sup>          Service Temp.: upto 1750 °C</p>	<p>PACAST-50          PACAST-50 SPL          PACAST-60          PACAST-60 SPL          PACAST-90</p> <p>PACTAB-94          PACTAB-97</p>
<p><b>High Purity Gel Bonded Castables</b></p> <p>BD – 2.1 to 2.75          CCS: upto 1100 kg/cm<sup>2</sup>          Service Temp.: upto 1750 °C</p>	<p>PACAST GEL-50          PACAST GEL-60          PACAST GEL-80          PACAST GEL-90</p>
<p><b>Medium Purity Dense Castables</b></p> <p>BD – 2.1 to 2.5          CCS: upto 460 kg/cm<sup>2</sup>          Service Temp.: upto 1450 °C</p>	<p>PACRETE          PACRETE-HS          PACRETE-XL</p>

**PACAST™ / PACTAB™ / PACRETE™**  
 (High / Medium Purity Dense Castables)

- A wide range of dense castables in high & medium purity varieties. These are used in various applications by different industries.
- Hydraulically bonded castables for high temperatures.
- Based on aluminosilicates, corundum & sintered aggregates.
- Good impact strength.
- Minimum shrinkage.
- High Resistance to abrasion.
- Excellent volume stability.
- High purity Tabular Alumina Castables for stringent operating conditions in Fertilizer, Refineries, Petrochemical industries.
- These are ready to install refractories which develop superior strengths on exposure to heat and under operating conditions.



## PROLITE™

### (Low & Medium Iron Insulating Castables)

- A wide range of insulating castables in high & medium purity varieties.
- Minimum shrinkage and excellent volume stability.
- Low Thermal Conductivity ensures minimum heat loss with significant fuel savings.
- Hydraulically setting, ready to install, these castables develop superior strengths at operating temperatures.

#### Insulating Castables (Medium Iron)

BD – 0.85 to 1.45  
CCS: upto 95 kg/cm<sup>2</sup>  
Service Temp.: upto 1300 °C

PROLITE-50  
PROLITE-55  
PROLITE-55 HS  
PROLITE-70  
PROLITE-80  
PROLITE-90

#### Insulating Castables (Low Iron)

BD – 1 to 1.6  
CCS: upto 135 kg/cm<sup>2</sup>  
Service Temp.: upto 1350 °C

PROLITE-50 Li  
PROLITE-70 Li  
PROLITE-80 Li  
PROLITE-90 Li

#### Plastic & Ramming Mass

BD – 2.1 to 2.7  
CCS: upto 1000 kg/cm<sup>2</sup>  
Service Temp.: upto 1750 °C

PACPLAST-45  
PACPLAST-60  
PACPLAST-70  
PACPLAST-80  
PACPLAST-90

PACPLAST-45 SPL  
PACPLAST-60 SPL  
PACPLAST-70 SPL  
PACPLAST-80 SPL  
PACPLAST-90 SPL

PACPLAST-60 (HC)

## PACPLAST™

### (Plastic & Ramming Masses)

- Refractory Plastics & Ramming Masses are monolithic refractories, which develop good structural strength upon exposure to heat.
- Plastics are of semi-stiff consistency and are installed primarily by pneumatic ramming.
- Ramming mixes are similar to plastics but contain less moisture, have less plasticity and can be placed by ramming or tamping.

## ALUPAC™

### (Non-wetting Castables for Aluminium Industry)

- A range of castables ideally suited for Aluminium melting and holding furnaces.
- Exceptional Resistance to wetting by molten Aluminium alloys. This results in longer refractory life, cleaner alloys & lower costs.
- Superior erosion resistance, volume stability & better thermal shock resistance.

#### Non Wetting Castables

BD – 2.6 to 2.9  
CCS: upto 900 kg/cm<sup>2</sup>  
Service Temp.: upto 1650 °C

ALUPAC-60 SPL  
ALUPAC-70 SPL

## CERABOND™

(High Strength Mortars for Dense and Insulating Bricks)

- A wide range of mortars offered with various alumina contents in both dry and wet states.
- The mortars develop exceptionally good strengths at low, intermediate & high temperatures.
- The mortars have high PCE Low shrinkage & good volume stability.

High Strength Mortars

CERABOND-30  
CERABOND-40  
CERABOND-50  
CERABOND-60

Mortars for Insulating Bricks

CERABOND-IM

Wear Resistant Castable

PACWEAR-1000

BD – 2.7  
CCS: upto 2000 kg/cm<sup>2</sup>  
Service Temp.: upto 1200 °C

## PACWEAR™ (Wear Resistant Castable)

- This castable offers superior wear resistance against heavy erosion at elevated temperatures upto 1200°C.
- Suitable for use in cements plants.

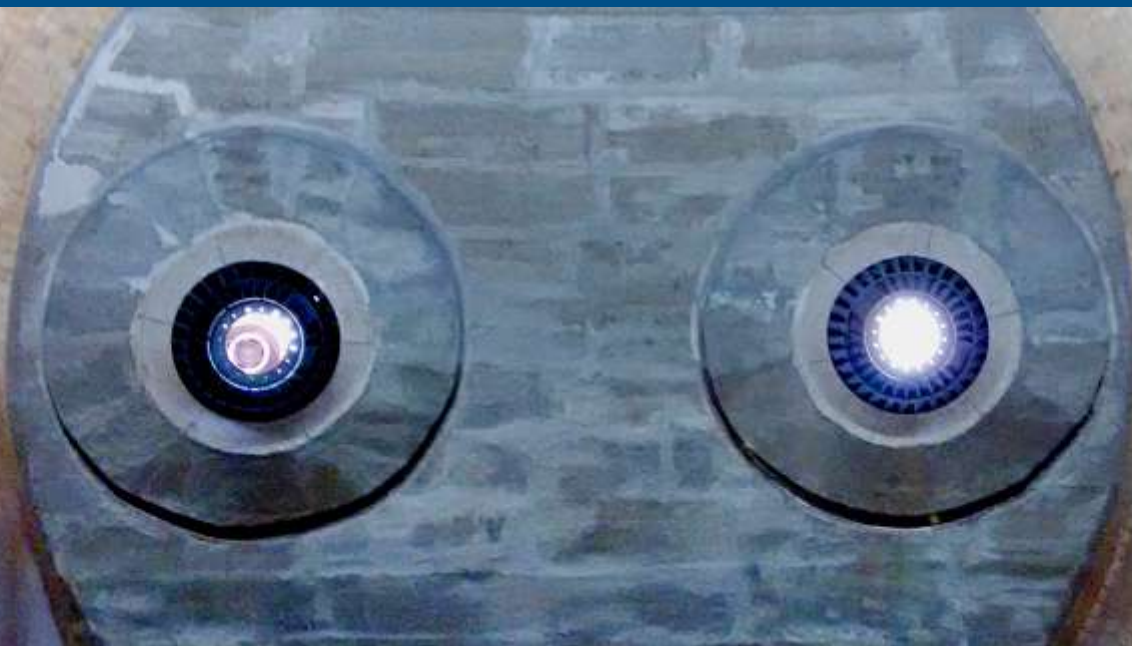
## PACSIC™

(Silicon Carbide based Castables)

Silicon Carbide Castables

PACSIC-35  
PACSIC-70

BD – 2.5 to 2.9  
CCS: upto 1000 kg/cm<sup>2</sup>  
Service Temp.: upto 1600 °C



## PACELL™ / HYPOR™

(Special & Conventional Insulating Bricks)

- The PACELL insulating bricks are specially formulated with uniform distribution of pores, so as to ensure maximum insulation. They are available in ASTM grade 16, 20, 23, 26, 28 & 30.
- Apart from low thermal conductivity, PACELL bricks have high strength, low iron, low PLC and high PCE, making them ideal for Fertilizers, Refineries, Petrochemicals, Carbon, Chemical & Steel industries.
- The conventional insulating bricks have moderately high strength, low bulk density, low thermal conductivity. They are used in a variety of applications, both as hot face or back up linings in furnaces, heaters, cyclones, ducting, convections sections etc.

### Special Insulating Bricks

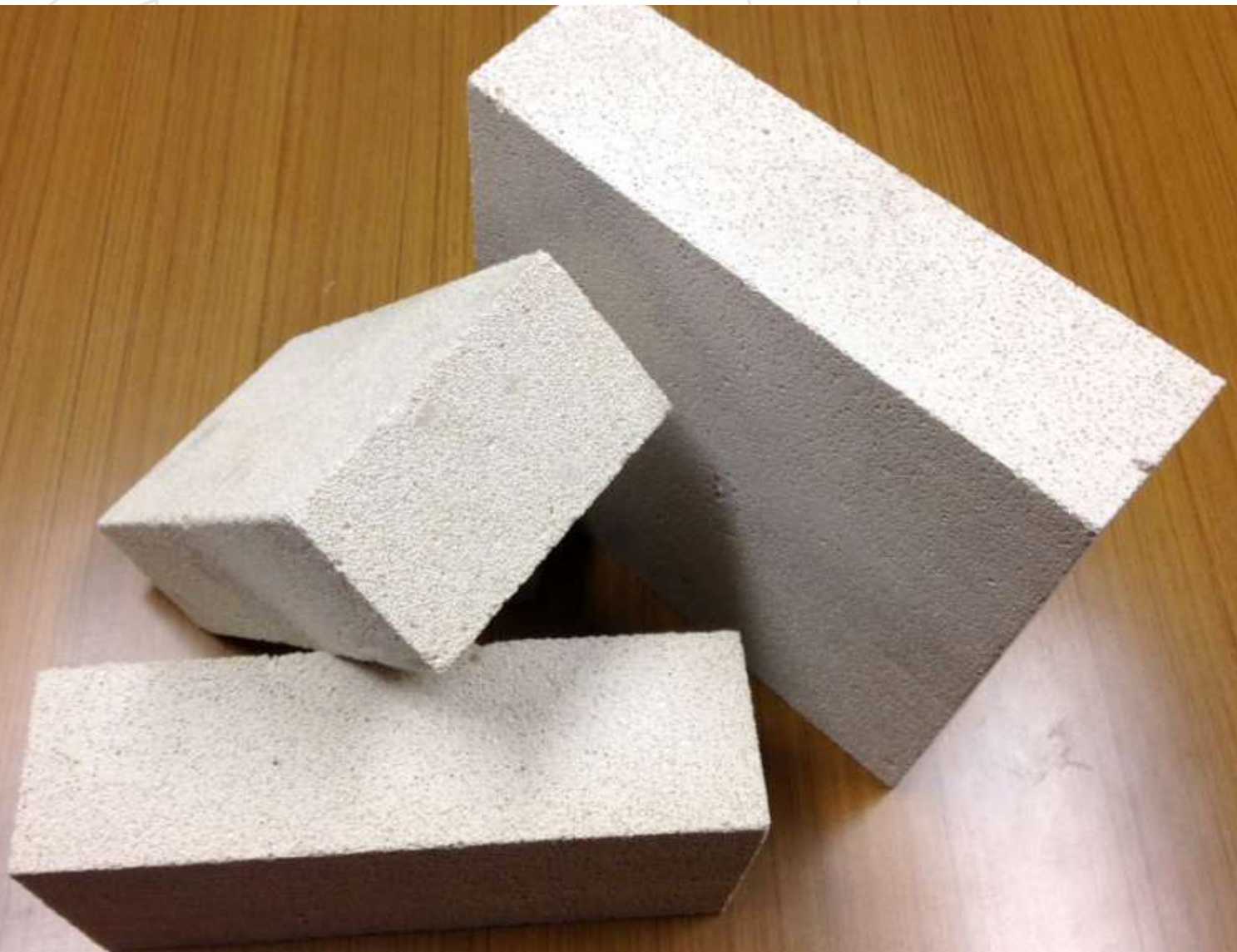
BD – 0.45 to 1  
CCS: Upto 40 kg/cm<sup>2</sup>  
Service Temp: upto 1650 °C

PACELL-16  
PACELL-20  
PACELL-23  
PACELL-26  
PACELL-28  
PACELL-30

### Conventional Insulating Bricks

BD – 0.5 to 1.5  
CCS: Upto 40 kg/cm<sup>2</sup>  
Sizes upto 800 mm Long  
Service Temp.: upto 1600 °C

HYPOR-CF-550  
HYPOR-CF-650  
HYPOR-CF-750  
HYPOR-CF-900  
HYPOR-CF-LW100  
HYPOR-CF-LW110  
HYPOR-HF-900  
HYPOR-HF-LW100  
HYPOR-HF-LW110  
HYPOR-HFK-135  
HYPOR-HFK-140





<p><b>Fire Clay Bricks</b></p> <p>BD – 2 to 2.3          CCS: upto 500 kg/cm<sup>2</sup>          Service Temp.: upto 1400 °C</p>	<p>PRL-30          PRL-35          PRL-35D          PRL-40          PRL-40S          PRL-42          PRL-42D</p>	
<p><b>High Alumina Bricks</b></p> <p>BD – 2.2 to 2.9          CCS: upto 1400 kg/cm<sup>2</sup>          Service Temp.: upto 1620 °C</p>	<p>PRL-45          PRL-45S          PRL-45D          PRL-50          PRL-450S          PRL-55          PRL-55S          PRL-Sill          PRL-60          PRL-60S          PRL-60A          PRL-60M          PRL-62A          PRL-62D</p>	<p>PRL-70          PRL-70M          PRL-70S          PRL-70L          PRL-70Li          PRL-72A          PRL-80          PRL-80S          PRL-80L          PRL-80P          PRL-85          PRL-85P          PRL-90          PRL-90K</p>

## DENSE FIRE BRICKS

(Fire Clay & High Alumina Bricks)

- Fireclay & High Alumina dense fire bricks with high cold crushing strengths.
- High PCE & RUL make these fire bricks ideal for a variety of applications.



## PACARB™

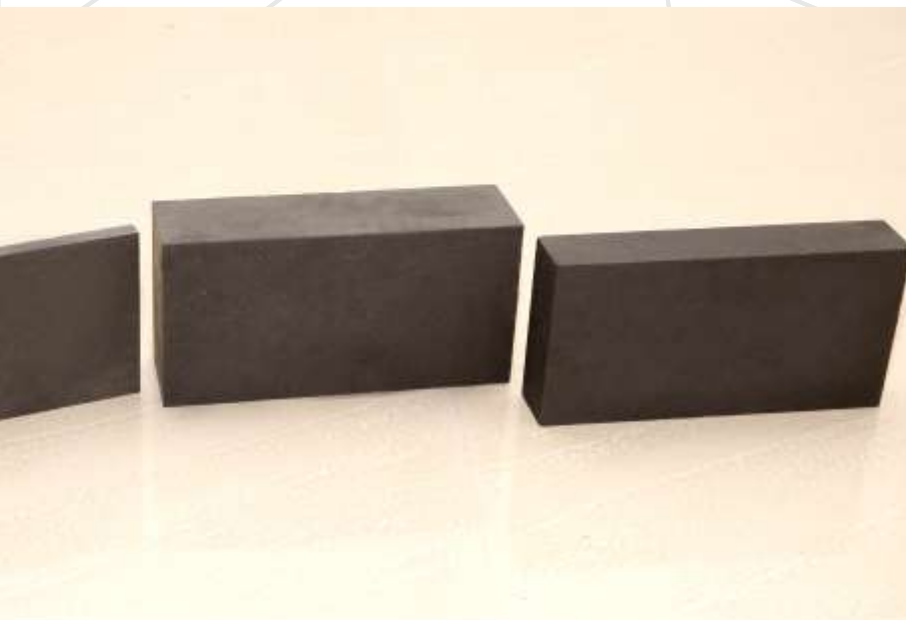
(Carbon & Graphite Bricks)

Specially formulated Chemical Grade Carbon and Graphite bricks are suitable for Phosphoric acid plants & Hydrofluoric acid areas etc. These are also available with low ash content.

Carbon & Graphite bricks

BD – 1.5 to 1.65  
 CCS: Min. 700 kg/cm<sup>2</sup>  
 Porosity: 8-18 %  
 Ash Content: upto < 2%

PACARB  
 PACARB-I  
 PACARB-G



### Acid Resistant Bricks

BD – 2.1 to 2.3  
CCS: Min. 700 kg/cm<sup>2</sup>  
Water absorption: upto < 2%

AR Class-I  
AR Class-II  
AR 4457  
AR SPL

## ACID RESISTANT BRICKS

Acid Resistant Bricks / Shapes are recommended for corrosive environments such as Sulphuric Acid Plants, acid storage tanks, pickling tanks, Sulphur Pits etc. They are also used in heavy duty floors which are subjected to frequent contact with corrosive acids.

## ACID RESISTANT MORTARS

- CERABOND-AR is a special silicate type acid proof mortar. It has excellent resistance to concentrated acids and chemicals. The mortar is totally inert to all organic solvents.
- FURALSET Mortar is a furane resin based bonding cement used for resistance to high concentration acids and alkalies and for temperatures up to 180° C.
- BITUMASTIC is used for applying as monolithic layer over concrete surfaces. It is a powder mix preparation. After application, the layer becomes impervious to fluids.
- PHENOLSET is a phenolic resin cement. It is resistant to practically all non-oxidizing inorganic acids, organic acids, oil, grease and solvent. It is suitable for use upto temperatures of 145°C. It is however not suitable for use under alkaline conditions.

Potassium Silicate based Mortar	CERABOND-AR
Furane based Mortar	FURALSET FURALSET (CF)
Bitumen mastic based Mortar	BITUMASTIC
Phenolic Resin based Mortar	PHENOLSET

## ACID RESISTANT CASTABLE

Acid Resistant Castable is used in Ducts, Stacks / Chimneys and other areas where the flue gas is acidic in nature. It is suitable for hand placement as well as guniting.

Acid Resistant Castable

PACAST-AR



## QUALITY ASSURANCE

We are fully committed to supply the best in class refractory products and we undertake stringent measures to ensure that we deliver quality materials as per specifications.

Our QA system consists of various checks at every stage of manufacturing – raw materials, trials and commercial production. This ensures that we deliver products, that will perform under the desired service conditions. Our quality system has been awarded ISO 9001:2008 certification by BM Trada for the entire range of our products.



# TOTAL REFRACTORY MANAGEMENT

## ENGINEERING

- Thermal Calculations
- Material Selection
- Detailed Engineering
- Construction Drawings

## MANUFACTURING

- Standard Product
- Custom Product
- Testing
- Packaging
- Delivery

## APPLICATION

- Refractory application
- Thermal Dry-Out
- Commissioning
- Training

## CONSULTANCY

- Field Investigations
- Troubleshooting
- Inspection Services
- Supervision Services

## Pacific Refractories Ltd.

### Office:

- C-16/3, TTC, MIDC Area, Thane-Belapur Road, Navi-Mumbai 400705. India  
info@pacifirefractories.com

### Works:

- Pansal Road, Bhilwara – 311 011. Rajasthan, India
- 8-A National Highway, Vaghasia, Wankaner - 363 622. Gujarat. India  
sales@pacref.co.in

