

CCEFIRE® LPD Series Low Porosity Dense Brick

Description:

CCEFIRE® LPD Series low porosity dense brick Al₂O₃ content is 30%-48%, SiO₂ content is 50%-65%, etc. Its refractoriness is 1580-1750°C, refractoriness under load is 1250-1450°C. The dense Dense refractory bricks are used in most industrial plants with high process temperatures with the special achievable properties.

Technical data and Size:

CCEFIRE® LPD Series Low Porosity Dense Brick									
Item	LPD-40	LPD-35	LPD34	LPD33	LPD32	LPD34S	LPD33S	LPD32S	LPD34S-1
Al₂O₃ (%)	≥40	≥45	≥42	≥40	≥35	≥40	≥38	≥33	≥42
Fe₂O₃ (%)	≤2.0	≤1.3	≤1.3	≤1.5	≤1.6	≤1.8	≤1.8	≤1.8	≤1.6
Refractoriness (°C)	≥1730	≥1770	≥1750	≥1730	≥1710	≥1750	≥1730	≥1710	≥1750
Apparent porosity (%)	≤15	≤14	≤16	≤16	≤16	≤19	≤19	≤19	≤18
Normal temperature compressive strength (Mpa)	≥49	≥70	≥60	≥50	≥45	≥40	≥35	≥35	≥45
Linear Change	1500°C×2h		±0.2	±0.2					
Arter Heating (%)	1350°C×2h			±0.2	±0.2	±0.2	±0.2	±0.2	±0.2
Refractoriness Under Load (T₂ °C)	≥1480	≥1500	≥1480	≥1450	≥1400	≥1400	≥1370	≥1350	≥1400

Raw Materials

Own large-scale ore base, professional mining equipment, and stricter selection of raw materials.

The incoming raw materials are tested first, and then the qualified raw materials are kept in a designated raw material warehouse to ensure their purity.

The raw materials of CCEFIRE fire bricks have low impurity content with less than 1% oxides, such as iron and alkali metals. Therefore, CCEFIRE clay bricks have high refractoriness.

Production Process

The fully automated batching system fully guarantees the stability of the raw material composition and better accuracy in raw material ratio.

With internationally advanced automated production lines of high-temp tunnel furnaces, shuttle furnaces, and rotary furnaces, the production processes from raw materials to finished products are under automatic computer-control, ensuring stable product quality.

Automated furnaces, stable temperature control, low thermal conductivity of CCEFIRE insulation bricks, excellent thermal insulation performance, less than 05% in the permanent line change, stable quality, and longer service life.

Various shapes of clay bricks can be made according to designs. They have precise dimensions with an error of +1mm and are convenient for customers to install.

Quality Control

Each shipment has a dedicated quality inspector, and a test report is provided prior to the departure of products from the factory to ensure the export quality of each shipment of CCEFIRE.

A third-party inspection (such as SGS, BV, etc.) is accepted.

Production is strictly in accordance with ASTM quality management system certification.

The outer packaging of each carton is made of five layers of kraft paper, and outer packaging + pallet,, suitable for long-distance transportation.

Application Performance

CCEFIRE refractory bricks are weakly acidic refractory materials with good thermal stability, so they are suitable for the lining of blast furnaces, hot blast furnaces, electric furnace top, blast furnaces, reverberatory furnaces, and rotary furnaces.