

Fused Silica Bricks



INTRODUCTION

Firebird Fused Silica Bricks (also called Zero Expansion Silica Brick) mainly consist of high purity fused silica materials. Its has many superior properties including excellent thermal shock resistance, nearly zero expansion rate, high refractoriness under load and low creep rate, high corrosion resistance to chemical substances and molten metals. Its can also be used without preheating.

The fused silica brick can be fabricated into various sizes, including very large blocks as well as into complex shapes, depending on shape and application such as: arch brick, hanger, peephole, burner, nozzle, damper, sagger, pillar, etc.

We also supply fused silica ceramics like gathering ball, stirring rod, ring, spouts, tube, plunger, feeder expendables, etc.

TYPICAL APPLICATION

- Coke oven refractory lining or repair;
- Glass furnace crown hot repair or refractories components;
- Aluminum casting launder sections, filter bowls and pouring spouts;
- Acid lining of chemical industry.

PHOTOS



TYPICAL INDEXES

Indexes	FS-99	FS-98	FS-97	FS-95
SiO ₂ (wt%)	≥99	≥98	≥97	≥95
Al ₂ O ₃ (wt%)	≤0.5	≤1.0	--	≤3
Fe ₂ O ₃ (wt%)	≤0.2	≤0.2	≤0.2	≤0.3
Bulk Density (g/cm ³)	1.90	1.85	1.80	1.75
Apparent Porosity (%)	≤18	≤20	≤20	≤20
Cold Crushing Strength (MPa)	≥45	≥35	≥30	≥30
Thermal Expansion (RT-1000℃) (×10 ⁻⁶ /℃)	0.6	0.6	0.7	0.8
Refractoriness Under Load, (℃@Ta)	≥1680	≥1670	≥1650	≥1550
Thermal Shock Resistance, (Cycles) 1100℃ to cool water	≥50	≥50	≥40	≥40

PACKING

By ISPM 15 Pallets or other packing way as per customer's request.

