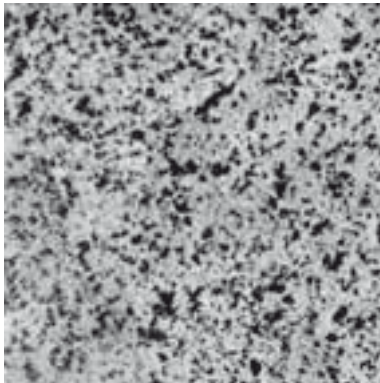
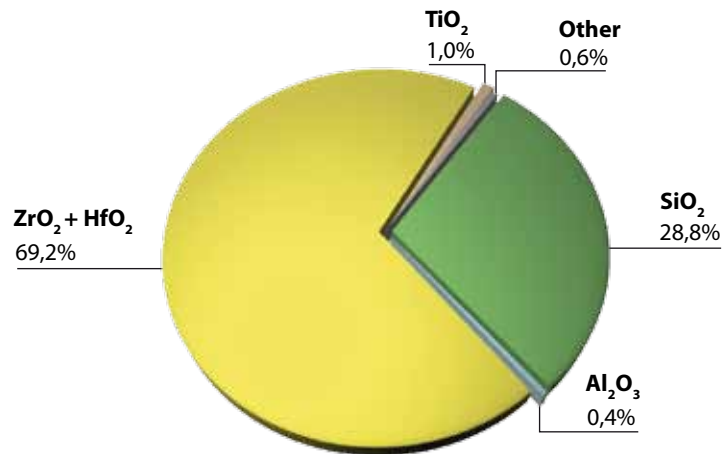


ZS 78 THE MATERIAL

CHEMICAL ANALYSIS



TYPICAL CHEMICAL COMPOSITION



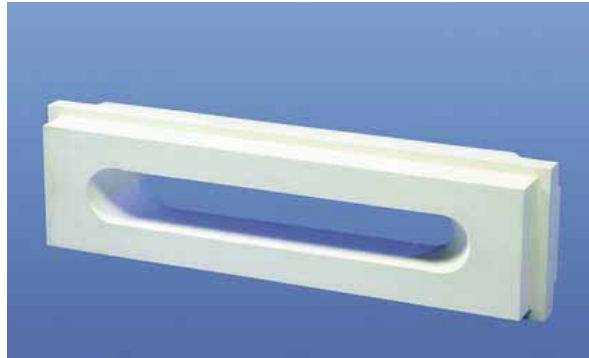
ZS 78 dense zircon is a unique composition consisting primarily of zirconium silicate (Zr SiO₄). It is specifically designed for applications where extreme thermal cycling or thermal gradients are present. ZS 78 provides the best thermal shock resistance of any available dense zircon refractory material.

PHYSICAL CHARACTERISTICS

| International System | British Standard Units |
|--|---|
| Bulk density 4.20 g/cm ³ | 262 pcf |
| Open porosity 10% | 10% |
| Cold modulus of rupture..... 38 MPa | 5511 psi |
| Cold crushing strength 300 MPa | 43511 psi |
| Thermal conductivity at 1000°C 3.1 W.m ⁻¹ .K ⁻¹ | at 1832°F 21.5 BTU in hr ⁻¹ ft ⁻² F ⁻¹ |
| Thermal shock resistance medium | medium |

ZS 78

THE MATERIAL



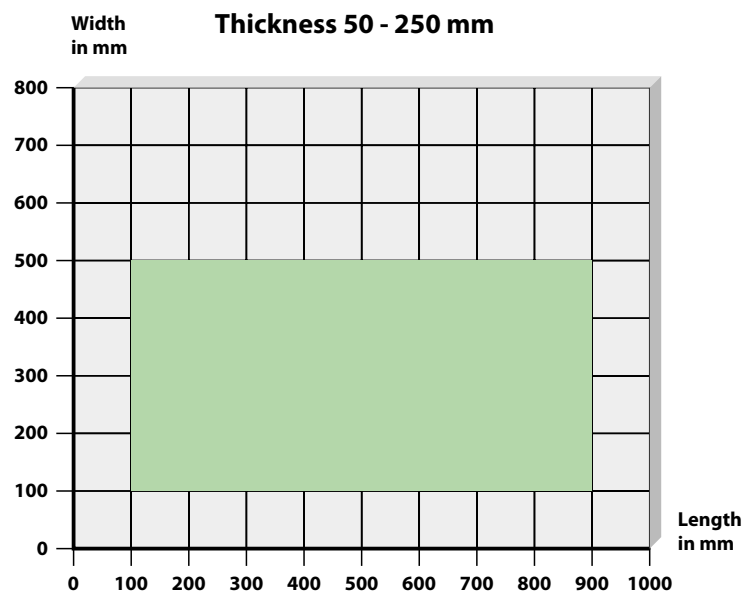
Bushing block

TYPICAL APPLICATIONS

ZS 78 is used in glass contact areas of the furnace where thermal cycling or gradients cause traditional refractories to crack thereby affecting refractory life or glass quality. These areas include melter sidewalls (particularly batching areas), bottom paving, refiners, forehearth, flow blocks, and bushing blocks. Due to its fine grain structure, ZS 78 is an excellent choice for use as bushing blocks in manufacturing very small diameter glass fibers.

ZS 78 should also be used wherever seeds or blisters represent a quality problem. Glasses include fiberglass (E glass), borosilicates, glass ceramics, low alkali compositions and other technical compositions.

SIZE CAPABILITY ESTIMATES



The data quoted above provides average values for current production and is not contractual. If further information is required, please contact the Saint-Gobain SEFPRO Marketing Department.