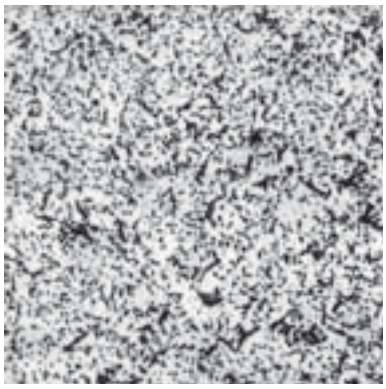
C 1215 Z

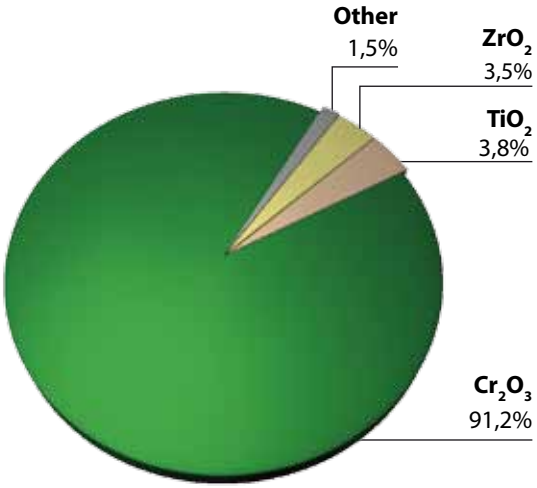
THE MATERIAL

CHEMICAL ANALYSIS



*Small quantities of SiO2, CaO, B2O3, Al2O3, MgO, and Alkali

TYPICAL CHEMICAL COMPOSITION



C 1215 Z is an isostatically pressed, thermal shock resistant high purity dense chromic oxide refractory. The microstructure has been modified to yield better thermal shock resistance compared to existing dense chromic oxide products, thereby minimizing cracking on furnace heat-up and operation. The inherent refractoriness of Cr2O3 combined with high density results in a refractory with unsurpassed corrosion resistance when used in a wide variety of molten glasses and slags. The stoning and blistering potential is also very low when using C 1215 Z.

CRYSTALLOGRAPHIC ANALYSIS

Principal phase ..... Chromic Oxide
Secondary phase ..... Monoclinic Zirconia

PHYSICAL CHARACTERISTICS

International System	British Standard Units
Bulk density ..... 4.33 g/cm^3	..... 270 pcf
Open porosity 15%	..... 15%
Cold modulus of rupture ..... 41 MPa	..... 5947 psi
Cold crushing strength ..... 240 MPa	..... 34809 psi
Coefficient of thermal expansion ..... 7.8 $10^{-6}K^{-1}$	..... 4.3 $10^{-6}°F^{-1}$
Thermal conductivity at 1000°C ..... 3.3 $W.m^{-1}.K^{-1}$	..... 22.8 BTU in $hr^{-1}ft^{-2}°F^{-1}$
Thermal shock resistance ..... fair	..... fair

C 1215 Z

THE MATERIAL

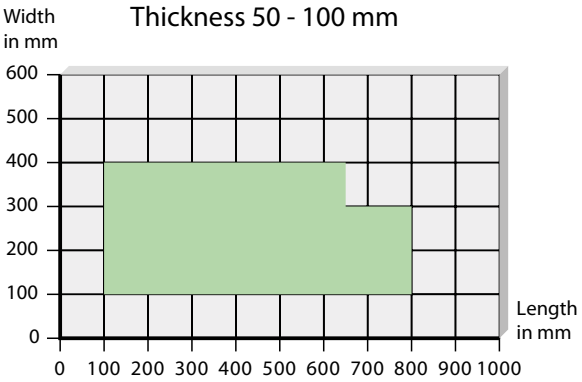
Bushing block

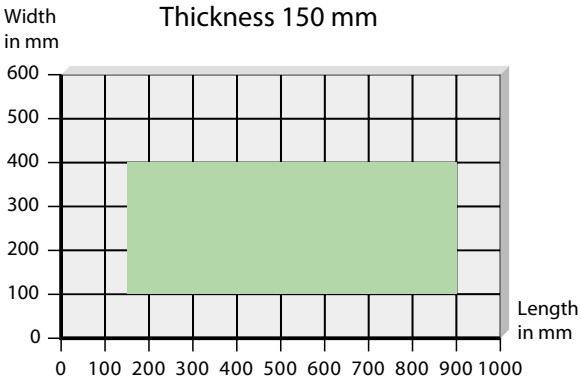
TYPICAL APPLICATIONS

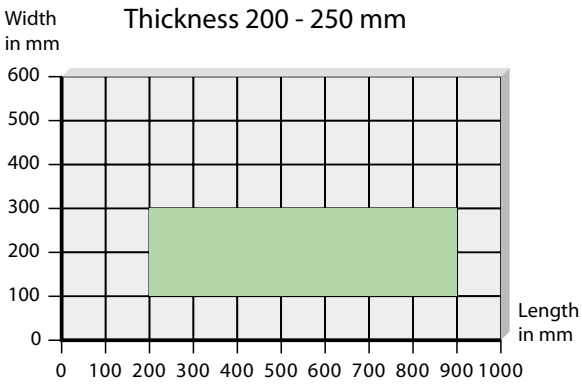
The principal application for C 1215 Z is in the critical high wear areas of furnaces melting glass for the production of reinforcing fibers and textiles (E glass).

High-wear areas include: melter sidewalls, bottom paving (particularly around bubblers) and doghouse corners; forehearth and channel siderails, flow blocks, bushing blocks, and corner blocks.

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.