



TECHNICAL DATA SHEET

ElectroShot™ 1116 SIC is a high alumina silicon-carbide, no-cement castable design to be installed by the shotcrete process.

- Based on Reno's propriety Electro Chemical bond system featuring a nano fluid electrolyte for ultimate performance.
• Rapid dry out capability while still retaining very low porosity.
• Excellent material for applications in foundries and steel mills with harsh conditions.
• Excellent resistance to iron, slag, thermal shock and oxidation.
• Recommended for use in blast furnace troughs and skimmer blocks, tilting runners, cupola wells, troughs, and tap-hole blocks.
• Excellent refractory for large blast furnace troughs where slag resistance at high temperatures is paramount.

Service Temperature: 3000°F
Electrolyte Type: E11
Addition Quantity: 4.0-4.5% (wt.)
Wt. Required for Estimating: 182 lb/ft³
Storage Life: 6 months

TYPICAL CHEMICAL ANALYSIS (Calcined Basis)

Table with 4 columns: Al2O3 (76.1), SiO2 (6.5), TiO2 (1.4), SiC + C (16)

TYPICAL PHYSICAL PROPERTIES shotcrete samples

Table with 9 columns: Prefire Temperature (°F), Modulus of Rupture (psi), Cold Crushing Strength (psi), Density (pcf), Porosity (%), Linear Change (%), Permeability (mDarcys), Thermal K (Btu/ft2/in/hr), Surface Area (m2/g)

Thermal Expansion Coefficient: 2.83E-6 in/in/°F (ASTM C832)
Thermal Shock Loss(after 2000°F): 15.2% MOR Loss (ASTM C-1171)

Hot MOR at 2500°F: 1178 psi (ASTM C583 – Orton)
Hot MOR at 2750°F: 980 psi (ASTM C583 – Orton)

Abrasion Loss After 1500°F: 6.0 cc (ASTM C704)
Abrasion Loss After 2500°F: 5.9 cc (ASTM C704)

PACKAGING: 55 lb. Bags, 72 per Pallet (3960 lbs.), 1500 lb. Bags, 2 per Pallet (3000 lbs.), 2000 lb. Bags, 2 per Pallet (4000 lbs.)
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The data presented represents typical average results obtained by testing under ASTM or other acceptable procedures as required. They are subject to normal variations and should not be used for specification purposes.