



TECHNICAL DATA SHEET

ElectroCast™ FST is a no cement castable containing a Forsterite-Magnesia mineralogy. It offers high refractoriness, hot strength, and resistance to molten metal and alkali.

- Recommended for molten iron and steel contact applications where metal temperatures are less than 3050°F/1676°C.
• Well suited for ductile iron ladles, and pressure pour - auto pour furnaces, steel tundish hot face applications, electric arc furnace water panel coverages, and other areas experiencing extreme iron oxide attack.
• Based on Reno's proprietary Electro-Chemical bond system featuring a nano particle electrolyte for ultimate performance.
• Low Permeability plus low porosity to restrict migration of alkali into the structure.
• Micro porosity of bond phase has greatly reduced reactivity to iron oxide.
• Reduced formation of slag buildup during ductile iron processing.

Service Temperature: 3050°F
Storage Life: 6 months
Electrolyte Type: E3
Addition Quantity(Wt.): 5.0-6.0%
Wt. Required for Estimating: 168 pcf

TYPICAL CHEMICAL ANALYSIS (% Calcined Basis)

Table with 6 columns: Al2O3, SiO2, Fe2O3, MgO, CaO, TiO2 and their respective values: 0.74, 26.96, 0.58, 70.36, 0.45, 0.17

TYPICAL PHYSICAL PROPERTIES (Cast Samples)

Table with 8 columns: Prefire Temperature (°F), Modulus of Rupture (psi), Cold Crushing Strength (psi), Density (pcf), Porosity (%), Linear Change (%)(From Green), Permeability (mdarcy) 0.3 Green, Thermal k Btu/in/ft2/hr

Thermal Expansion Coefficient 5.84E-6 in/in/°F
Thermal Shock Loss (after 2000°F): 25% MOR Loss (ASTM C-1171)
Abrasion Loss After 1500°F: 13.3 cc (ASTM C704)
Abrasion Loss After 2500°F: 17.5 cc (ASTM C704)
Abrasion Loss After 2800°F: 13.8 cc (ASTM C704)

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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.