



ARMORMAX[®]

HIGH METAL FIBER CONTAINING REFRACTORY



Global **Refractory** Solutions



PRODUCT INNOVATIONS



ARMORMAX® can withstand repeated thermal cycling, mechanical impact and abrasion due to its high reinforcing needle content. The metal fibers are pre-blended and uniformly distributed in the refractory matrix. ARMORMAX® offers the following benefits:

- High fracture toughness when thermally cycled
- Low abrasion loss
- High mechanical impact resistance
- Well suited for applications up to 1200°C (2200°F) continuous exposure
- Characterized for low water requirements (ranging from 4.5% to 6.5% by weight)
- All versions are low-cement castables
- Very good flowability properties for high needle-bearing refractory castables



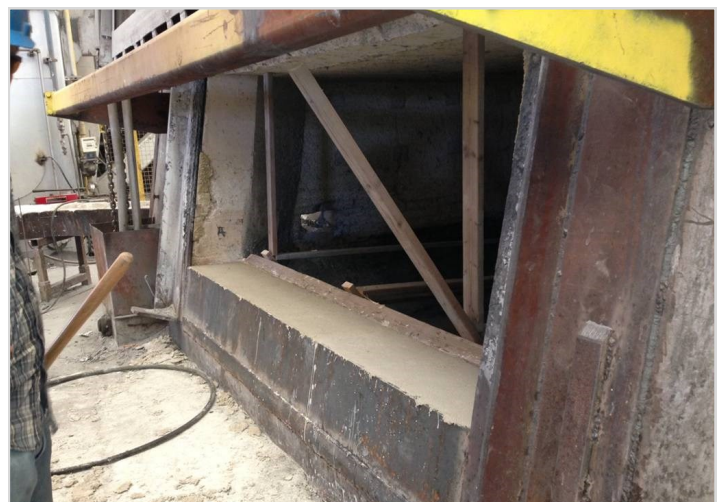
ARMORMAX® 70 SR in forge furnace sill



Aluminum reverb furnace sill cast with ARMORMAX® 70 AC



ARMORMAX® 70 SR forge furnace sill after 18 months in service



Completed reverb furnace sill with ARMORMAX® 70 AC



ARMORMAX® 90 SR

90% alumina, tabular-based castable. For use in higher temperature applications in a wide range of highly corrosive environments.

ARMORMAX® 85

85% alumina bauxite-based castable. For use in molten metal splash conditions such as VOD covers. Develops exceptional strengths and as a result, is a good value versus 90% alumina castables.

ARMORMAX® NRSA

82% alumina, bauxite-based castable. Designed for high temperature applications in the cement industry including nose rings, tail rings, bull noses, cooler curbs and door sills. Exceptional strengths after firing to (816°C) 1500°F.

ARMORMAX® AZS 5HZR

27% zirconia-containing, mullite-based castable. Extraordinary resistance to alkali attack in cement applications and other mineral processing environments. Ideal for boiler applications where alkali attack is prevalent.

ARMORMAX® 608

60% alumina, mullite-based castable with a small SiC addition to enhance resistance to alkali attack and improve non-wetting characteristics in certain molten metal contact applications.

ARMORMAX® 70 SR

70% alumina, mullite-based castable. Designed for withstanding thermal shock, abrasion and mechanical impact. Ideally suited for forging and heat treating furnace applications in jambs, sills, lintels, pier blocks and hearths.

ARMORMAX® 70 AC

68% alumina, mullite-based castable. Similar formulation to ARMORMAX 70 SR with a non-wetting additive for aluminum contact applications. Highly resistant to abrasion and mechanical impact in applications such as door sills.

ARMORMAX® 28 SiC

28% silicon carbide-bearing, mullite-based castable. Developed for improved alkali resistance in cement applications, specifically where mechanical impact is an issue.



Rotary cooler with ARMORMAX® 70 SR



ARMORMAX® 70 SR hearth plates, sill and jambs



ARMORMAX® 70 AC aluminum reverb sill



APPLICATION GUIDE

√ = Recommended
O = Optional

ARMORMAX® 70 SR
ARMORMAX® 85
ARMORMAX® 90 SR
ARMORMAX® 28 SiC

HEAT TREAT AND FORGE	70 SR	85	90 SR	28 SiC
Box-Type				
Hearth	√	√	√	√
Jams	√			
Sill	√			
Lintel	√			
Slot Forge				
Apron	√			
Jams	√			
Hearth	√	√	√	√
Car Bottom				
Car Perimeter	√			
Hearth	√			
Jams	√			
Lintel	√			
Tip-Up				
Pier blocks	√			
Rotary Hearth				
Hearth	√	√		
Jams	√			
Lintel	√			

ALUMINUM	70 SR	70 AC
Jams	√	
Lintel	√	
Sill		√
Top Ring (Round Top Charge Reverbs)	√	
Impact Walls (Stack melter)	√	√
Launder / Trough Impact Pad		√

FOUNDRY	70 SR	NRSA	28SiC	AZS5HZR
Charge Door Openings	√	√		
Starter Blocks				
Molds	√			
INDUSTRIAL				
Cement				
Nose Ring		√	√	√
Bull Nose	√	√	√	
Tail Ring	√	√	√	√
Cooler Curbs	√	√		
Damper Blades		√	√	
Lime				
Preheater	√			

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