ARMORMAX®

HIGH METAL FIBER CONTAINING REFRACTORY

ALLIED MINERAL PRODUCTS

Global **Refractory** Solutions

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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® 70SR in forge furnace sill

Aluminum reverb furnace sill being cast with ARMORMAX® 70AC

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

Completed reverb furnace sill with ARMORMAX® 70AC

PRODUCT LINE

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 higher 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.

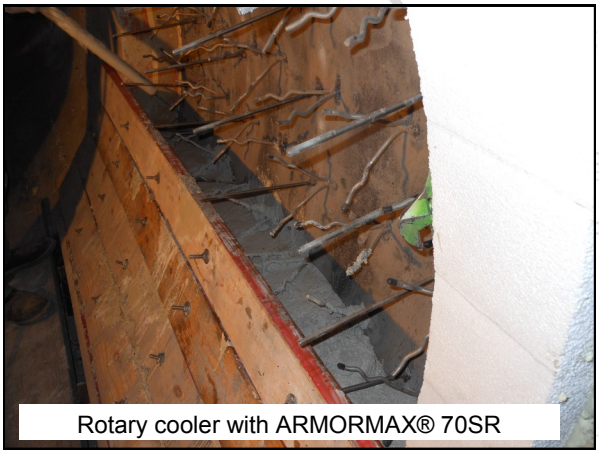
ARMORMAX AZS 5HZR
27% zirconia-containing, mullite-based castable. Extraordinary resistance to alkali attack in cement applications and other mineral processing environments. Ideal for boiler applications where alkali attack is prevalent.

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. Essentially, the same formulation as 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® 70SR


ARMORMAX® 70SR hearth plates, sill and jambs


ARMORMAX® 70AC aluminum reverb sill

APPLICATION GUIDE

√ = Recommended
O = Optional

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

ALUMINUM	70 SR	70 AC
Jambs	√	
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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