

# ARMORMAX 70 SR refractory perimeter Heat treating car bottom furnace deck

## Case study



### EQUIPMENT

- 25'L x 9'9"W #3 car bottom furnace deck

### PRODUCT

- ARMORMAX 70 SR shock-resistant, high needle-bearing 70% alumina castable

### APPLICATION

- Heat treating furnace in a seamless rolled ring facility
- Operating temperature of 1350°F (733°C)
- Thermally cycled on a regular basis

### INSTALLATION

- March 2013: ARMORMAX 70 SR perimeter was cast in place in three: 5'L x 20"W x 13"H sections
- Competitive 60% alumina castable with 3% needles cast in two sections adjacent to ARMORMAX

### RESULTS

- August 2013: The competitive 60% alumina castable perimeter cracked and spalled after 5 months in service.
- ARMORMAX 70 SR appearance is unchanged since the March 2013 installation
- Removed the sections of competitive castable in #3 furnace and replaced it with ARMORMAX 70 SR
- Perimeter of #4 furnace was also replaced due to ARMORMAX's resistance to cracking and spalling
- Customer ordered precast pier blocks made from ARMORMAX 70 SR due to the outstanding performance in the cast perimeter



ARMORMAX 70 SR perimeter adjacent to competitive 70% alumina castable



Closeup of competitive castable



All edges and corners are still sharp and intact.

Closeups of ARMORMAX 70 SR

**Inquiries: email us at [allied@alliedmin.com](mailto:allied@alliedmin.com) or contact your Allied sales representative**

Notice that the Armormax 70 SR hasn't lost a top or corner edge after 5 months of service. The edges are as sharp as the day we cast them.

