



CASE STUDY:

ARMORMAX® 70 SR PIER BLOCKS

APPLICATIONS IN CAR-BOTTOM FURNACES

EQUIPMENT

Car-bottom furnace

PRODUCT

ARMORMAX® 70 SR pier blocks

APPLICATION

- The subject furnace cycles several times a day and uses high velocity air cannons to rapidly quench treated parts, so the pier blocks are exposed to a severe thermal shock environment.
- The customer trialed pier blocks cast out of a low cement mullite and fused silica castable with a 3% stainless steel fiber addition.
 - The pier blocks only lasted 6 months.

INSTALLATION

- Customer agreed to trial ARMORMAX® 70 SR pier blocks.
- The pier blocks were installed in a car-bottom furnace with an operating temperature of 900°C (1650°F).

RESULTS

- ARMORMAX® 70 SR was trialed and has lasted **3.5 years** in this extreme environment.
- The use of ARMORMAX® 70 SR pier blocks significantly extended the performance of the pier blocks.
- The results were successful and has reduced the frequency of new pier blocks.



ARMORMAX® 70 SR pier blocks after 2 years of continuous service



The same ARMORMAX® 70 SR pier blocks after 3.5 years of continuous service

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Allied Mineral Products, Inc. supplies an entire line of monolithic refractories for the metals industry. For more information or a complete evaluation of your refractory requirements, please contact your local Allied representative.