

BARRICADE SLB 128

HarbisonWalker International (HWI) has been keeping the iron and steel industry moving for more than 150 years. We are one of the largest suppliers of refractories to the US iron and steel industry. As the inventors of COMANCHE®, we revolutionized ladle refractory practices. Today, the tradition of innovation continues with our new, unique, dual-carbon bonded slagline brick: BARRICADE SLB 128.

SLAG RESISTANCE

BARRICADE products utilize a unique dual-carbon bond that, in combination with oxidation resistant additives, increases their resistance to slag corrosion by reducing vertical cracking.

EXTENDED SLAG LINE LIFE

BARRICADE SLB 128 is more resistant to thermal shock, which helps to extend service life in shops where production cycling may be an issue.

MECHANICAL STRENGTH

BARRICADE SLB 128 displays high hot strength, providing greater resistance to mechanical erosion. This is a benefit in areas such as the stir plug where erosion may be high.

SHORT LEAD TIME

BARRICADE SLB 128 is manufactured in White Cloud, Michigan, USA. Delivery times are drastically cut when eliminating the need to ship across oceans.

For North American steel ladle operators who experience early failure in their slag line and prefer to purchase US-made brick, HarbisonWalker International's BARRICADE SLB 128 offers extended slag line life and increased thermal shock resistance.



Diverse Product Portfolio

HarbisonWalker International is one of the largest domestic manufacturers of steel ladle refractories. Our extensive and diverse portfolio of products allows us to provide the lining configuration that best fits your needs and budget.

Ladle working linings are refractories directly in contact with molten steel and slag in the bottom, barrel, and slag line. They must be able to withstand any secondary refining, heating, rinsing, and alloying. These operations affect the slag line, as well as the barrel and bottom of the ladle. Working linings can be either brick or monolithic and are selected on the basis of operating conditions and slag compatibility.

There are many options for proper lining design that utilize different shapes and installations. They usually are selected based on the size of the ladle, the availability of skilled brick layers, and the availability of installation equipment such as mixers, pumps, and shotcrete. The final selection is always unique and based on shop-specific conditions.

HWI is a full-scale ladle refractory supplier and offers all of the necessary special assemblies, including bottom assemblies, tilt bricks, starter sets, well blocks, pocket blocks, stir plugs, and lip retention systems. In many cases the specific designs are custom made to fit individual steel shop ladle sizes and metallurgical conditions.

SLAG LINE BRICK

BARRICADE SLB 128 brick contains 100% high-purity fused magnesium oxide, 12% carbon, and a unique dual-carbon antioxidant package. BARRICADE SLB 128 utilizes HWI's latest technology for high corrosion resistance for slag and resistance to thermal shock.

PHANTUM® XL148 SUPER brick contains 100% high-purity fused magnesium oxide, 14% carbon, and antioxidants. This brick performs well where corrosion by slag is a problem, especially over stir plugs. Resistance to thermal shock is good due to the high carbon.

MAGNUM XL12F brick contains 100% fused magnesium oxide grain, 12% carbon and antioxidants. Hot strengths are higher than in PHANTUM® XL127 brick, and MAGNUM XL12F brick is thus well suited for over-the-stir plugs.

PHANTUM® XL127 brick contains 100% fused magnesium oxide grain, 12% carbon, and antioxidants commonly used in slag lines. Slag resistance is good, and the high carbon makes the brick good for resistance to thermal shock.

CHEMICAL ANALYSIS		PHANTUM® XL 127	MAGNUM XL 12F	PHANTUM® XL 148 SUPER	BARRICADE SLB 128
Magnesia	(MgO)	83.0	78.0	82.0	83.9
Fixed Carbon	(C)	11.0	12.0	14.0	11.9
PHYSICAL PROPERTIES		PHANTUM® XL 127	MAGNUM XL 12F	PHANTUM® XL 148 SUPER	BARRICADE SLB 128
Bulk Density	lb/ft ³ (g/cm ³)	183 (2.93)	183 (2.93)	182 (2.95)	187 (3.0)
Modulus of Rupture	lb/in ² (MPa)	1650 (11.4)	2000 (13.8)	1550 (10.7)	2300 (16.1)
Apparent Porosity %					
	As received	5.5	5.0	5.7	4.1
	Coked	10.3	10.0	10.5	9.2

Additional Support

In addition to refractory product leadership, we have the largest field presence in the US iron and steel industry, and we pride ourselves on world-class customer service that begins with one call.

Our dedicated iron and steel application specialists provide highly customized solutions and have a depth of knowledge unparalleled in the industry.

Our Value-Added Service (VAS) team can provide a wide range of support, from simple consultation to on-site installation services. We have equipment rental services and a full range of inventory solutions. We can also provide priority access to our Advanced Research and Technology Center testing services. Our role can be customized to your needs. We can step in as simply a product supplier, or we can take the job all the way through installation. You decide.



Every day around the world, HarbisonWalker International's people and products stand up to the challenges and pressures of every job. And for more than 150 years, companies have relied on our world-class products that continue to set the gold standard for the refractory industry. At HWI, we design solutions that help improve efficiencies, make installations easier, extend campaign lives, and save customers millions of dollars. And it all begins with our intensely driven service teams.

Availability, Education & Training

Dedicated sales personnel ready to respond 24/7/365

19 manufacturing facilities producing refractory products in North America, Europe and Asia

30 North American global sourcing centers providing one of the quickest response times in the refractory industry

- Usually shipping with same-day or next-day delivery
- Staging and shipping to anywhere in the world
- Ready-to-ship inventory of our best selling refractories

On-going educational seminars at our Advanced Technology & Research Center

Customized, on-site training for customers upon request

Webcasts and video training modules upon request

Installation, Service & Support

Support from HWI's network of premier contractor/installers

Available benefits of a Value-Added Service (VAS) Team:

- Single source responsibility that delivers cost savings
- Just-in-time delivery of refractory materials, ensuring the freshest product on the jobsite
- Inventory solutions
- Quick response times, minimizing outages and downtime
- More in-depth knowledge of your business, yielding the best refractory solutions
- Embedded HWI team members and resources at your site

Global Projects & Engineering

Specialists in new projects offering a range of services, from refractory product supplier all the way to full installation partner

- Greenfield construction
- Manufacturing and plant modernization

Serving the advanced engineering needs of existing facilities

- End to end delivery of refractories: drawings, products and installation
- Strong conceptual drawing capabilities with meticulous attention to detail

Our Advanced Technology & Research Center is the largest facility in the US devoted to refractory development, quality assurance and failure analysis