

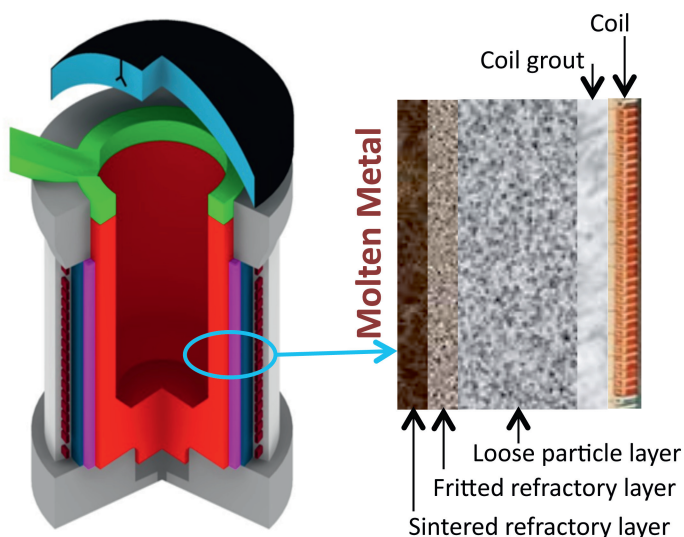


Next Generation Refractory Solutions for Coreless Induction Furnaces

Saint-Gobain is a 350 year old conglomerate that is present in over 64 countries across the world with leadership positions in all sectors in which it participates. Under the Ceramics Division of Saint-Gobain comes “High Performance Refractories”- a business unit involved in the manufacturing and selling of a wide range of highly specialized products for a large number of industrial applications in sectors related to Metallurgy, Wear Resistance, Energy, Waste-to-Energy conversion, Ceramic Systems or Ballistic Armor.

As a part of its offerings for Metallurgical applications, Saint-Gobain provides comprehensive solutions, under its HeatKing™ range of products, for lining applications in Induction Furnaces for the production of various kinds of steel. The products are manufactured in Saint-Gobain’s state-of-the-art plants in India located in Halol, Gujarat and Bangalore, Karnataka. In addition to the product offerings, complete technical support is provided for installation and application engineering through a team of well qualified engineers.

HeatKing™ presents an innovative monolithic lining solution with a unique structure to deliver best performance in terms of quality of the steel produced, cost per unit mass of steel produced, productivity, safety, energy efficiency and sustainability.



Our key strengths:

- ▶ Wide range of product portfolio and complete solution for coreless induction furnaces
- ▶ Dedicated application engineering team to support customer process
- ▶ In-house R&D for customer support and new product development
- ▶ State of art manufacturing plants , ISO certified
- ▶ Customer training for HeatKing™ product use and operations optimization

	Furnace zone	HeatKing™ Product Solution
Small furnace (<6MT)	Main Lining	VA1247SF
	Topping / Patching Material	PA900
	Coil Coat	CA339
Scrap Remelting	Main Lining	VA1173 (<10MT) VA1248LG (>10MT)
	Topping Material	TA1211
	Coil Coat	CA337
Sponge Iron Melting	Main Lining	VA1173 (<10MT) VA1248LG (>10MT)
	Topping Material	TA1211
	Coil Coat	CA337
Sponge Iron Melting (Dephos Process)	Main Lining	VA 150 NorPhos®
	Topping Material	TA1211
	Coil Coat	CA337

HeatKing™ product solutions already feature NorPhos® VA150 product, a furnace lining material specially developed for phosphorous reduction process during melting operations, helping customers to comply with latest technology and law requirements in India.

HIGH PERFORMANCE REFRACTORIES





Next Generation Refractory Solutions for Coreless Induction Furnaces

The HeatKing™ product line specially developed for steel melting in coreless induction furnaces helps the customer to run its operations more efficiently. Our products are not only of outstanding performance during melting, they can also participate in an optimized energy consumption and melting operations organization.

Key Parameters	HeatKing™ Benefits
Quality	Higher metal purity due to less “inclusions” ensuring quality completely in line with BIS Standards Fully compatible with the De-PHOS process
Cost	Lower cost per unit mass of Hot Metal Produced on account of – - 4 to 5 Times higher campaign life with the option of multiple “patchings” - More efficient Alloy Recovery - Possibility to keep Hot Heel in Furnaces - Less Power consumption - Lower Labor
Productivity	Clear increase in productivity on account of – - Longer life & less down time - Optimization of former design
Safety	No chance of metal penetration, if installation is done properly, because of - High refractoriness of the lining (as compared to acidic linings) - Back up Powder Layer
Energy Efficiency & Sustainability	Unique lining structure that ensures lower power consumption (less CO ₂ Foot-print) thanks to - Optimized powder back up lining leading to minimal conduction loss - Optimized Lining thickness leading to maximum induction heating



Saint-Gobain’s HeatKing™ products show advantages in cost savings in the overall production cost compared to other refractory linings. With the help of our Savings Calculator, we are able to provide detailed information how the use of HeatKing™ products participates in saving costs of e.g. refractory, former, energy, silico manganese or maintenance time and efforts.

Adopt HeatKing™, the next generation in Induction Furnace Linings, and be a part of the transformation.



For any technical support & query contact:
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