

EXCELLENCE TO ENGINEER
A BETTER, SAFER AND
GREENER WORLD



PERFORMANCE CERAMICS & REFRACTORIES





SAINT-GOBAIN

Worldwide leader in light and sustainable construction, Saint-Gobain designs, manufactures and distributes materials and services for the construction and industrial markets in 75 countries. The Group is one of the 100 largest industrial companies in the world and has a leading position in all its strategic business areas, guided by its purpose, **MAKING THE WORLD A BETTER HOME.**



SAINT-GOBAIN PERFORMANCE CERAMICS & REFRACTORIES

Saint Gobain Performance Ceramics and Refractories is part of Saint-Gobain's Ceramic Materials division, which offers Engineered Ceramics & Refractories solutions for industrial application, with extreme operating conditions, high temperature and wear.

SAINT-GOBAIN OFFER FOR INDUCTION FURNACE STEEL PRODUCTION

Saint-Gobain offers a range of customized refractory lining solutions (Neutral Ramming Masses, Spout mixes, Patching Masses, Coil Grouts, specialized services) for each segment of induction furnace based secondary steel making under its "HeatKing" range of products and services.



SAINT-GOBAIN STEEL CLUB

At Saint-Gobain Performance Ceramics and Refractories, we value our customers and their loyalty. Our most valued customers have been specially selected to be part of our Saint-Gobain Steel Club – an exceptional loyalty program of a community of experts aiming at reaching the highest standards of quality performance and sustainability in the industry.

OUR POWER PACKAGE

Our Neutral Ramming Mass (NRM) solutions in foundries...



...reduce CO₂ emissions by 100K TCO₂ every year



...are Crystalline Silica free, and thus contributing to a much safer environment for your operating teams.

MAKING THE WORLD A BETTER HOME

OUR COMMITMENT

Being carbon free by 2050

OUR AMBITION

To provide solutions to our customers that contribute to de-carbonization and reduce environmental footprint.

SUSTAINABILITY AT THE HEART OF OUR BUSINESS STRATEGY

Sustainability is a key tenet of modern environmental, social, and corporate governance (ESG). At Saint-Gobain Performance Ceramics and Refractories, our business model directly contributes to critical ESG outcomes with a dual approach to sustainable development goals: **Minimizing our environmental footprint while maximizing our virtuous impact across the entire value chain.**

OUR 2030 OBJECTIVES

WATER

- - **50%** Industrial water withdrawal
- **0** water discharge in area with extremely high water risk



CO₂ EMISSIONS

- - **33%** reduction in scope 1 and scope 2 emissions
- - **16%** reduction in scope 3 emissions



CIRCULAR ECONOMY

- - **80%** non valorized production residue
- + **30%** avoidance of virgin raw material
- **100%** recyclable packaging with 30% recycled or bio-sourced content



PRODUCT STEWARDSHIP

- **100%** Life Cycle Analysis for all of Group product ranges



PIONEERING CERAMIC SOLUTIONS FOR EXTREME INDUSTRIAL APPLICATIONS AND A GREENER WORLD.



YOUR BENEFITS

Categorizes are awarded based on volume and frequency of sales.

		BRONZE ★	SILVER ★★	GOLD ★★★	PLATINUM ★★★★
PROFESSIONAL TRAINING Basic Training (on site / online)		FREE	FREE	FREE	FREE
EXPERT TRAINING Advanced Training (Certification Program @ Saint Gobain Bangalore Plant)		10% REBATE	30% REBATE	40% REBATE	50% REBATE
PROFESSIONAL INSTALLATION SUPPORT Basic Installation Support		FREE	FREE	FREE	FREE
EXPERT INSTALLATION SUPPORT Advanced Installation Techniques & Tools		10% REBATE	30% REBATE	40% REBATE	50% REBATE
EXPERT TECHNICAL SUPPORT	PROFESSIONAL TECHNICAL SUPPORT Trouble Shooting	FREE	FREE	FREE	FREE
	Comprehensive Technical Process Audit (Once a year)	FREE	FREE	FREE	FREE
	Process Optimization based on “Big Data Analysis” Techniques	10% REBATE	30% REBATE	40% REBATE	50% REBATE
	Process Simulation & Optimization at Pilot Set-Up in Bangalore	10% REBATE	30% REBATE	40% REBATE	50% REBATE
SUSTAINABILITY RECYCLING Sustainable Management of used Refractory Linings		FREE	FREE	FREE	FREE
SUSTAINABILITY AUDIT CO₂ MAPPING Audit to Map Carbon Footprint with recommendations to reduce the same		10% REBATE	30% REBATE	40% REBATE	50% REBATE

BENEFIT PROGRAM DETAILS

TRAINING

PROFESSIONAL

on site / online

Refractory Lining Types (Acidic / Basic / Neutral)

- Definitions
- Properties & Characteristics

Advantages / Disadvantages of Each Refractory Lining Type

- Environment, Health & Safety
- Performance
- Cost

Installation & Sintering Techniques with Neutral Lining (Basic Module)

- Standard Operating Procedures for Installation & Sintering
- Assessment of the "Quality" of Installation & Sintering

EXPERT

Certification Program
@ Saint Gobain - Bangalore

Re-cap of Basic Training

- Refractory Lining Types
- Advantages / Disadvantages of Each Refractory Lining Type
- Installation & Sintering Techniques with Neutral Lining (Basic Module)

Induction Furnaces

- Types of Induction Furnaces
- Assessment of Induction Furnace Health (Condition)

Failure Modes & Root Causes in Each Refractory Lining Type

- Erosion Patterns
- Failures on account of Corrosion
- Failures on account of Thermal Shock

Installation & Sintering Techniques with Neutral Lining (Advanced Module)

- Standard Operating Procedures for Installation & Sintering
- Assessment of the "Quality" of Installation & Sintering
- Design of "Formers"
- New Sintering Techniques

INSTALLATION

PROFESSIONAL

Former Design

- Dimensions recommendations in line with OEM guideline
- Fabrication techniques

Initial Lining

- Supervision Support for development Trials
- Trial Completion report

Patching

- Supervision Support for development Trials
- Trial Completion report

Sintering

- Supervision Support for development Trials
- Trial Completion report

EXPERT

Charge Mix Analysis

- Impact of charge mix on overall Furnace Performance
- Optimum use of each raw material

Access to Advanced Application Toolkit

- Use of special tools during application
- Reports of used tools

Supervision and monitoring

- On demand supervision by Saint-Gobain Service Team
- Involvement of Saint-Gobain Engineering Team on need basis

Advanced Sintering Techniques (Solid Sintering)

- Share prerequisites of Solid Sintering
- Supervision till first heat tapping



BENEFIT PROGRAM DETAILS

TECHNICAL SUPPORT

PROFESSIONAL

Troubleshooting

- On site Support from Service engineer
- On call support from Application engineer

Non-Conformance Investigation, Analysis & Resolution

- Comprehensive report from Saint-Gobain team
- Suggestions on corrective & preventive measures

EXPERT 1

Level-1

Comprehensive Process Audit

- Audit report submission on regular interval
- Performance improvement suggestions

Furnace Health Check and suggest modification

- Routine furnace health check
- Suggestion to minimize breakdowns

Advanced Analysis by Saint-Gobain Research India

- Solving specific technical problems
- Joint development project of customer

EXPERT 2

Level-2

Process Optimization through Data Analysis

- Data visualization of operating parameters and other deeper insights
- Offer solution based on insights driven from data inputs

Process Simulation & Optimization using Pilot Induction Furnace

- New development work for customers
- Support of Saint-Gobain application expertise



BENEFIT PROGRAM DETAILS

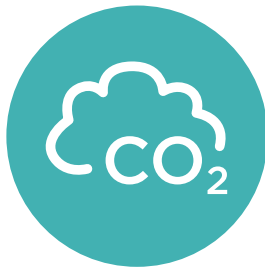
SUSTAINABILITY

Management / Recycling of “used refractory linings”

- Optimize the recycling of used refractories for a better circular economy
- Audit & support to minimize and avoid refractory waste

Mapping of carbon footprint & reduction techniques

- Suggestions to reduce carbon emission





YOUR MAIN CONTACT



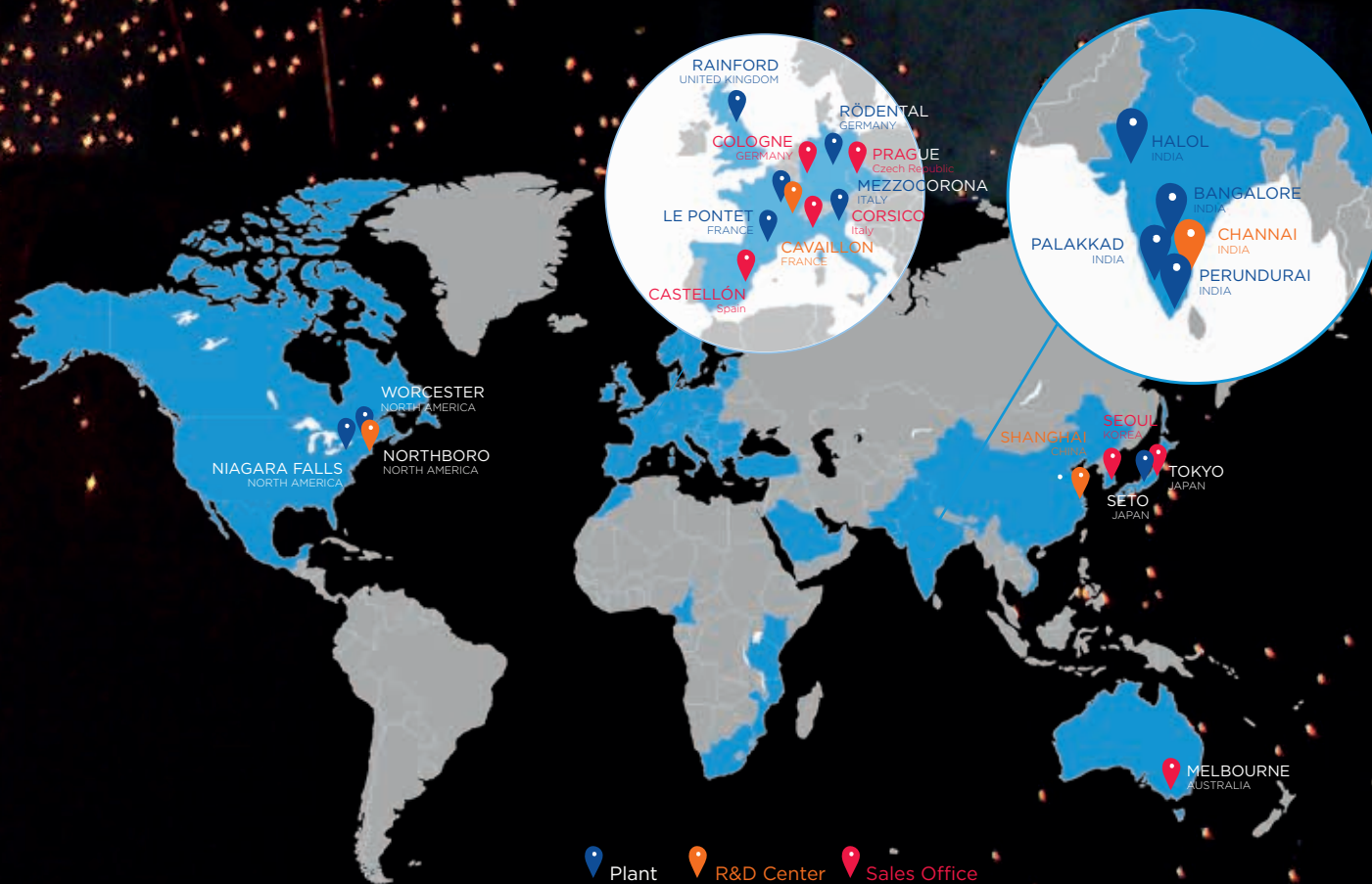
SCAN TO CONNECT
and discover more
about our HeatKing™ solutions

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Follow us on: www.linkedin.com/company/saint-gobain-performance-ceramics-refractories

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