

REHEAT FURNACE





CALDERYS

150+ years of combined experience

6,500+ people and contractors in over 30 countries

50 plants in the 5 continents

One of the world's largest supplier in high temperature solutions

Enlarged portfolio of solutions from refractory bricks and monolithics to steel casting fluxes and green molding sand solutions

Calderys is a leading global provider for industries operating in high temperature conditions. We specialize in thermal protection for industrial equipment with a wide range of refractory products, and advanced solutions to enhance steel casting, metallurgical fluxes and molding processes.

In 2023, Calderys joined forces with HarbisonWalker International, the largest supplier of refractory products and services in the United States.

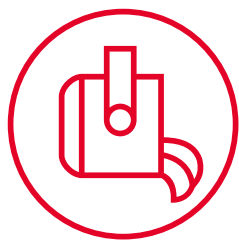
Together, we form a high-growth, customer-centric provider with a comprehensive offering and a truly global reach. Drawing on over 150 years of combined experience, we support our customers in their energy transition needs. We count more than 6,500 people and contractors, in over 30 countries.

Our international network of experts ensures an end-to-end offer with tailored services.

We are constantly developing innovative products and techniques in order to **optimize costs and performance**, combining world-class Research & Development and technical experts, as well as responsive supply chain and sales departments.

Our global structure allows us to design the customized solutions of today while **anticipating the industries' needs of tomorrow**. Calderys pays particular attention to the industry's impact on the environment and has a sustainability program articulated around three pillars: supporting our customers in their energy transition needs, improving our environmental footprint and being committed to people and local communities.

Health and safety is an integral part of how we do business. The same attention to detail that helps us provide personalized products and solutions is also applied to our rigorous health and safety criteria. Our activities require the highest level of professionalism to carry out our projects. To guarantee the strictest standards, Calderys employs a number of safety, occupational health and environmental protocols across all its entities worldwide — applicable to both our own employees as well as subcontractors and temporary workers.



OUR VALUE TO THE IRON & STEEL INDUSTRY

As a prominent ally to the Iron & Steel industry, Caldeyrs has steadily enlarged its service solutions from ironmaking, liquid steel processing, continuous casting, reheat furnaces and other equipments. With innovation and sustainability as fundamental parts of our DNA, we have pioneered a tremendous number of new applications, such as pitch-free tap-hole clay for blast furnaces and our cutting-edge mold fluxes. Through the combination of HarbisonWalker International and Caldeyrs' expertise, the company is offering complementary product portfolios and total care services, bringing a vast array of solutions to support customer needs in all refractory and casting fluxes applications.

What we bring to the Iron & Steel industry

- Close watch over ESG topics, such as product CO₂ footprint calculation, proposing a large range of refractory products resistant to H₂; as well as Environment, Health and Safety (EHS) concerns like the reduction of respirable crystalline silica (RCS) and Phenol (PaH).
- Complete portfolio of customized solutions from ironmaking, liquid steel processing, continuous casting, reheat furnaces and other equipment.
- Full set of refractory services: from engineering & design, installation, project management, dry-out & commissioning, to maintenance and refractory assessments.
- Process analysis including fluid flow and numerical simulations.
- Technical support from trial to after sales.



OUR VALUES TO THE **REHEAT INDUSTRY**



Calderys is a trusted supplier to reheat furnace manufacturers and operators all over the world, with references from the top global OEMs in the heat treatment field.

Calderys will ensure that you benefit from refractory solutions that are:

- **Adapted to key reheat technologies** such as walking hearth, walking beam and pusher furnaces – any type of treatment furnaces using temperatures up to 1,500°C
- **Customised for local needs** through regional product ranges, refined through project experience around the globe in Europe, India, Asia and the US
- **More energy-efficient** as we work with our clients to find the best product selection to offer high lining lifetime along with strong insulating properties
- **Optimised to save you from downtime**, maximising your production through various quick drying refractory options and reliable refractory solutions
- **Service-oriented through reheat project experience**: going beyond quality products for maintenance and turnkey projects from our teams along with installation partners globally

PROJECT REFERENCES

Calderys is a reliable choice for all your refractory needs. Ask us about our project references around the world for key reheat furnace technologies, including:

- Walking hearth furnace
- Walking beam furnace
- Pusher furnace
- Rotary furnace
- Roller furnace
- Soaking pit furnace
- Annealing furnace
- Bogie furnace

OUR SERVICES



PRODUCT SELECTION

By carefully examining your equipment and processes, we are able to provide you a complete personalized solution meeting your needs (dense, insulating castables, custom precast shapes, and many more).



ENGINEERING

Calderys engineers focus on your specific processes to propose a technical solution in order to achieve energy saving for highest thermal efficiency, lesser downtime to increase your productivity, and increased performance of your furnace.



PROJECT MANAGEMENT

Whether you are building a completely new furnace or performing important maintenance work, Calderys has experience and skills to manage your full refractory project end-to-end.



INSTALLATION

To ensure optimal performance for your refractory, Calderys provides full installation services through our certified installation teams around the world (Calderys & partners), including safety officers and supervisors.



MAINTENANCE

So that our customers can focus on their core processes, Calderys offers regular and predictive refractory maintenance as well as rapid round-the-clock response to emergencies.



SAFETY

Because safety is our priority, to ensure safe execution, supply, and installation, Calderys can provide you with all required documents and personal safety equipment to execute a project in the safest possible way.

OUR REFRACTORY SOLUTIONS

Calderys has a complete range of refractory products for all reheat furnace types:

- **Traditional plastic design:** world-renowned CALDE® and ACCCAST PLAST product lines such as our famous SUPERAL range which is available in ramming and gunning versions for roof, walls, burners, etc. The gunning version can reduce the installation time and improve the working conditions of the installation staff.
- **Our wide range of monolithics:** from the conventional, to low/ultra low cement, and no-cement castables such as sol-gel technology and QD
- **Insulating castables range to replace fibres for more safety for your teams:** extra-light (XL), light-weight (LW), medium-weight (MW) options available
- **Trading items such as bricks or fibres** (among others) are possible depending on customer needs



CERAMIC & METALLIC ANCHORS

Based on Calderys experience, a personalized solution is advised in order to ensure the best performance.

SKIDS & POSTS

Proven solutions are used around the world for decades, developed especially for walking beam and pusher type furnace applications – Calderys is able to propose precast or cast in-situ solution.

PRECAST SHAPES

At Calderys, we are proud to offer precast articles. An accurate manufacturing in our facility combined with high-performing monolithic refractories will assure the best performance.

Calderys is able to provide precast solutions roof, wall, hearth, burner, skid and post applications:

- Latest technology: precast burner blocks (low NOx, regenerative burners, all OEM types)
- Diamond roof popular option for heat efficiency
- Prefab blocks for pusher furnace floor
- Electrofused blocks option for pusher furnaces – perfect for severe conditions with double the lifetime of other precast options

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