RHI Magnesita at a glance 2020

### The driving force of the refractory industry





# The global leader in refractories

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As global leader we use our resources, worldwide presence and **expertise** to drive change in the refractory industry for the benefit of our customers who rely on us. 💔

Stefan Borgas **Chief Executive Officer** 



Leader











Get in touch

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# **RHI Magnesita**

RHI Magnesita is the global leader in refractories. We have the largest number of locations around the world and the most innovative, reliable products and services. We also provide the most robust supply and quality security, thanks to our exceptional vertical integration — from mining to production

### We have a vital job to do ...

### \*

Refractory products are used in all the world's high-temperature industrial processes. Without them, the steel, cement, lime, non-ferrous metals, glass, energy, environment and chemical industries couldn't exist.

Refractories defy the most hostile conditions to stay strong and stable at temperatures of 1200 °C and much, much higher. To contain materials safely while they're burned, melted, blasted, fired, fused, and shaped. And to protect equipment such as furnaces and kilns against thermal, mechanical and chemical stress.

Our job is to provide answers to these extreme challenges and to tailor the best solutions for our customers. These range from bricks and lining mixes to flow control products such as slide gates, nozzles and plugs. Their service lives range from a few cycles within a day to as long as 10 years. The base materials we use to make them are magnesite and dolomite — remarkable materials which themselves require skillful handling: the melting point of fused magnesia is above 2800 °C. € 2.3 bn 2020 revenue

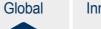
Over the next four to five years, we will invest **€ 50 m** to trial carbon capture technologies

> Refractories defy the most hostile conditions to stay strong and stable at temperatures of 1200 °C and much, much higher.



Leader





Innovation

Mining



Get in touch

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Leadership is not just about being the biggest or strongest. To us, it's about using those advantages to set the pace of innovation in our industry. 💔

# ... and we take leadership seriously \*

and the industries that rely on us. business results.

Content Challenges

Leader





















Leadership is not just about being the biggest or strongest. To us, it's about using those advantages to set the pace of innovation in our industry - and deliver the best for our customers. So we don't take our market leadership for granted. We aim to stay No.1 by driving positive change in our industry, By applying our exceptional resources, we're working to enhance not only our customers' operations but their

#### **Steel division** contributes



70% of group revenue

Industrial division contributes



30% of group revenue

# There for you, wherever you need us



### \*

The more closely we work with our customers, the greater the difference we can make for them. So having a global network of offices, research centers and production sites is important to us, and to them. We'll go on extending our global reach, to be nearer to even more customers.

Being closer to customers doesn't just mean we can be more responsive to their needs. It also helps us to listen better - to understand their concerns, cultures and ways of working. And to be alert to new thinking and ideas that enable us to deliver ever better advice, service and solutions.

Our exceptional resources and expertise extend far beyond making and selling products. We also provide solutions to customers worldwide for cover projects, materials specification, thermal studies, numerical simulations, follow-up and technical support in application of minerals, and maintenance and electromechanical services for refractory equipment.

**Americas** 7% **Revenue distribution** 

> 28 Main production and raw material sites

5 R&D hubs and centers

70+ Sales offices around the world

125 +Countries customers are served



Challenges Leader Global









Culture

West Asia

7%



# Taking innovation to 1200°C and beyond

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€ 62 m R&D and technical marketing investment

### 1,550

Active patents (applications and granted)

**1,900** Active trademarks (pending or registerd)

Content Challenges

Leader

Global











At RHI Magnesita, innovation takes place in extreme conditions. Holding and pouring hot liquids may seem quite simple. But when the liquid is molten metal at 1200 °C or more, it's a real challenge. We're applying advanced science and technology — in materials, robotics, sensors, big data and machine learning — to transform industrial processes at extreme temperatures. The team of over 540 employees is concerned with our overriding goal of pushing the limits of what is feasible in our industry and that of our customers.

But our innovation doesn't stop there. It is a mindset that everyone at RHI Magnesita shares. "How can we do this better?" is part of our culture to take social and economic responsibility as well as respect – in the areas of human resources, finance and customer service, R&D just as much as production and our environment.

For clients in capital-intensive, highly competitive industries, it's important that our leading technology is matched by a strong focus on creating customer value through innovative processes, business models and customer relationships, as well as consideration for our environment. So all of us work as a team to make processes quicker, products more cost-effective, environmentally friendly and solutions more beneficial for our customers.

# Leaving nothing to chance

### \*

Our products account for only around two to five percent of a customer's production costs. But their reliability — of supply and performance — is absolutely crucial. A single missed shipment or product failure could shut down a whole plant.

We'd rather leave nothing to chance. So we've made RHI Magnesita the most vertically integrated company in the industry.

The source materials for refractory products are the naturally occurring minerals magnesite and dolomite, and magnesia processed from seawater. Our resources include the world's best reserves of dolomite. This gives us extremely high levels of supply security and quality control. In a volatile global marketplace, it also helps to stabilize costs and secure long-term price competitiveness for our customers. Full vertical integration means we can take meaningful responsibility for end-to-end customer service and complete bespoke solutions, extending from raw materials production through to installation and management services to recycling of used materials.

#### 70% Backward integrated in

basic raw materials

7 Combined sites

5 Raw materials sites

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We'd rather leave nothing to chance. So we've made RHI Magnesita the most vertically integrated company in the industry.



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#### Serving our customers

We're acknowledged industry leader in innovative technology. But to deliver results for customers, that technology has to be put to work effectively. By people.

That's why we attach so much importance to our people. To attracting and retaining the best talent. To a leadership style that encourages openness, fresh thinking and initiative. To a collaborative culture that values ideas and determination to add value for our customers. Colleagues who are down-to-earth, positive, energetic and optimistic make strong teams who get results.

Many of our people work on-site with our customers, helping to optimize their use of refractories and develop tailored solutions. We take pride in their reputation for being friendly, trustworthy partners, who are bright, responsive and easy to work with.

#### 12,000 Employees

+540 Technical experts globally

Employees by tenure

Up to **3** years **28%** From **4** to **6** years **18%** From **7** to **9** years **13%** Over **10** years **40%** 

### Respecting communities and the environment

We've taken the lead in applying technology to make refractory products efficiently without harming people or the environment. Through digitization, robotization, automation and new materials we continue to make our factories cleaner and greener.

We set high targets for quality and environmental standards across our entire business. And we've established an integrated management system to ensure we consistently meet those high standards of quality, environmental protection, and occupational health and safety throughout the group.

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# Ultimately we're all about people

We report regularly and transparently on our sustainability performance in our annual report. And as well as engaging positively with their local communities, many of our sites hold open days — we've found that seeing how we work significantly increases local support and respect.

As part of our end-to-end service, we also help customers use our products more sustainably. We're working with leading universities and research institutions on new natural and synthetic raw materials and recycling concepts to utilize used refractory material now and in the future.

# The driving force of the refractory industry

### Get in touch

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Leader





Innovation

on Mining



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RHI Magnesita is the driving force of the refractory industry. With around 12,000 highly skilled people in 28 main production sites and more than 70 sales offices, we are the leading global supplier of high-grade refractory products, systems and services. These enable the high-temperature production of steel, cement and glass and many more materials essential to daily life.

