

# The driving force of the refractory industry

**Analyst presentation**

November 2017



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# Agenda

<b>9:30</b>	Introduction Refractory industry overview RHI Magnesita overview Building a global leader in refractories	<b>12:00</b>	Q&A
<b>10:30</b>	Q&A	<b>12:30</b>	Lunch
<b>10:45</b>	Coffee break		
<b>11:00</b>	Strategy Financials		

# Compelling investment case

1

## **Solid strategy and competitive advantages**

- Best market position with 15% market share, clear leadership in Americas, Europe and Middle East with broadest value-added solution offering
- Opportunity to develop and leverage technology across regions and portfolio
- Highest level of vertical integration in the industry with unique mineral sources and 50%+ self-sufficiency in all raw materials

2

## **Rapid deleveraging and strong cash conversion**

- Strong cash flows from operating business supported by synergies and organic growth opportunities
- Cash usage priority on deleveraging within 2 years to reach investment grade rating

3

## **Significant synergy potential**

- At least €70m EBITA synergies in SG&A, procurement and production network
- Additional “below the line” opportunities in working capital, capex, financing and tax under intensive evolution

# Today's presenters

Name and position	Professional background
<b>Stefan Borgas</b> <i>CEO</i>	<ul style="list-style-type: none"> <li>Mr. Borgas was appointed CEO at RHI on December, 2016 and currently acts as CEO of RHI Magnesita and member of the Executive Management team</li> <li>From 2012 to 2016, he was president and CEO at Israel Chemicals Ltd.</li> <li>Between 2004 and 2012, he was the CEO at Lonza Group.</li> <li>From 1998 to 2004, he worked at BASF Group, where he held various management positions</li> <li>Mr. Borgas has a business administration degree from Saarbrücken University and an MBA from the University of St.Gallen-HSG.</li> </ul>
<b>Octavio Lopes</b> <i>CFO</i>	<ul style="list-style-type: none"> <li>Mr. Lopes currently acts as CFO of RHI Magnesita and member of the Exec. Management Team</li> <li>Mr. Lopes was Magnesita Refratarios' CEO from June 2012 to July 2016 and Magnesita International Ltd.'s CEO from August 2016 to October 2017. He has been Chairman of the Board of Magnesita Refratarios since August 2016</li> <li>Mr. Lopes held several executive positions at GP Investments, including managing director and partner, between 1997 and 2012</li> <li>He previously served as CEO of Equatorial and as board member of several companies including Magnesita, BHG, Tempo, Equatorial, CEMAR, Allis, Gafisa and Submarino</li> <li>Mr. Lopes holds a bachelor's degree in economics from the University of São Paulo and an MBA from the Wharton School at the University of Pennsylvania</li> </ul>
<b>Eduardo Gotilla</b> <i>Corporate Finance &amp; Investor Relations</i>	<ul style="list-style-type: none"> <li>Mr. Gotilla currently leads Corporate Finance &amp; Investor Relations at RHI Magnesita</li> <li>Mr. Gotilla was Magnesita's CFO from September 2014 until October 2017, having joined Magnesita as Global Finance Director on February 2013</li> <li>From 2014 – 2017 he served on the Board of BB PREVIDÊNCIA - Fundo de Pensão do Banco do Brasil, a £1.3 billion pension fund.</li> <li>His 15+ years of experience in Finance includes positions at Opus, Banco Pactual, Merrill Lynch, GP Investments and San Antonio Internacional.</li> <li>Holds a bachelor's degree in Economics from IBMEC-RJ</li> </ul>



# Refractory industry overview

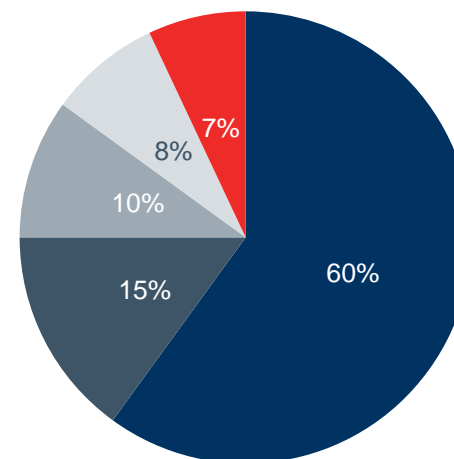


# Refractories are critical to all high-temperature industrial processes

- Refractories are critical consumable or investment goods for high-temperature manufacturing processes
- Fireproof materials consumed whilst protecting clients' production processes, retaining physical and chemical characteristics when exposed to extreme conditions
- Critical, yet represent less than 3% of COGS in steel manufacturing and less than 1% in other applications

## Main end markets €20 billion worldwide industry

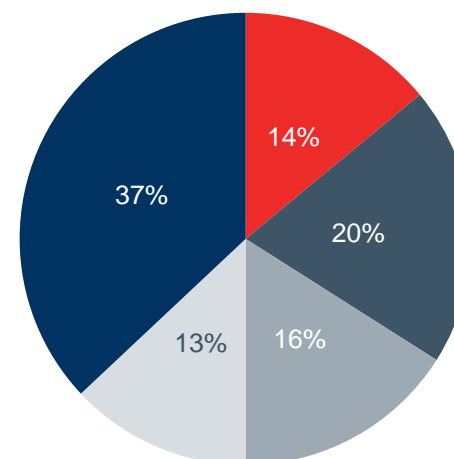
- Steel
- Energy, chemicals
- Nonferrous metals
- Cement
- Glass



Source: Company estimates

## Global refractory industry

- RHI Magnesita
- 4-6 segment companies
- 10-20 regional companies
- 100-200 small local companies
- 1000+ Chinese companies



Source: Company estimates of market share in US\$

# Refractories are continuously consumed during finished goods production

Key industries	Applications	Replacement	Costs	Refractory characteristics
<b>Steel</b>	Basic oxygen-, electric arc furnace casting ladles 	20 minutes to 2 months	~3.0%	<b>Consumable product</b>  Systems and solutions for complete refractory management  Demand correlated to output  <b>Investment goods</b>  Longer replacement cycles  Customized solutions based on the specific requirements of various industrial production processes  Complete lining concepts including refractory engineering  Wide areas of application  Project driven demand cycles
<b>Cement/Lime</b>	Rotary Kiln 	Annually	~0.5%	
<b>Nonferrous metals</b>	Copper-converter 	1 – 10 years	~0.2%	
<b>Glass</b>	Glass furnace 	Up to 10 years	~1.0%	
<b>Energy/ Environmental/ Chemicals</b>	Secondary reformer 	5 – 10 years	~1.5%	



# A complex range of tailored refractory products are required for each application

## Bricks



1 Permanent lining



2 Non-basic,  
ex. Alumina



3 Basic, ex.  
Mag-Carbon

## Monolithics and pre casts



4 Mixes



5 Pre Castables

## Functional products



6 Slide Gates



7 Nozzles



8 Purge Plugs



9 ISO

## Example of refractory application for steel ladle



**+Systems and machinery**

# RHI Magnesita overview



RHI MAGNESITA



# Doing everything, for everyone, everywhere

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**€2.5bn**

2016 pro-forma revenue

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**10,000**

Customers served globally

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**14,000**

Employees spread  
over 37 countries

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**35**

Main production sites across  
16 countries

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**180**

Countries shipped worldwide

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**13**

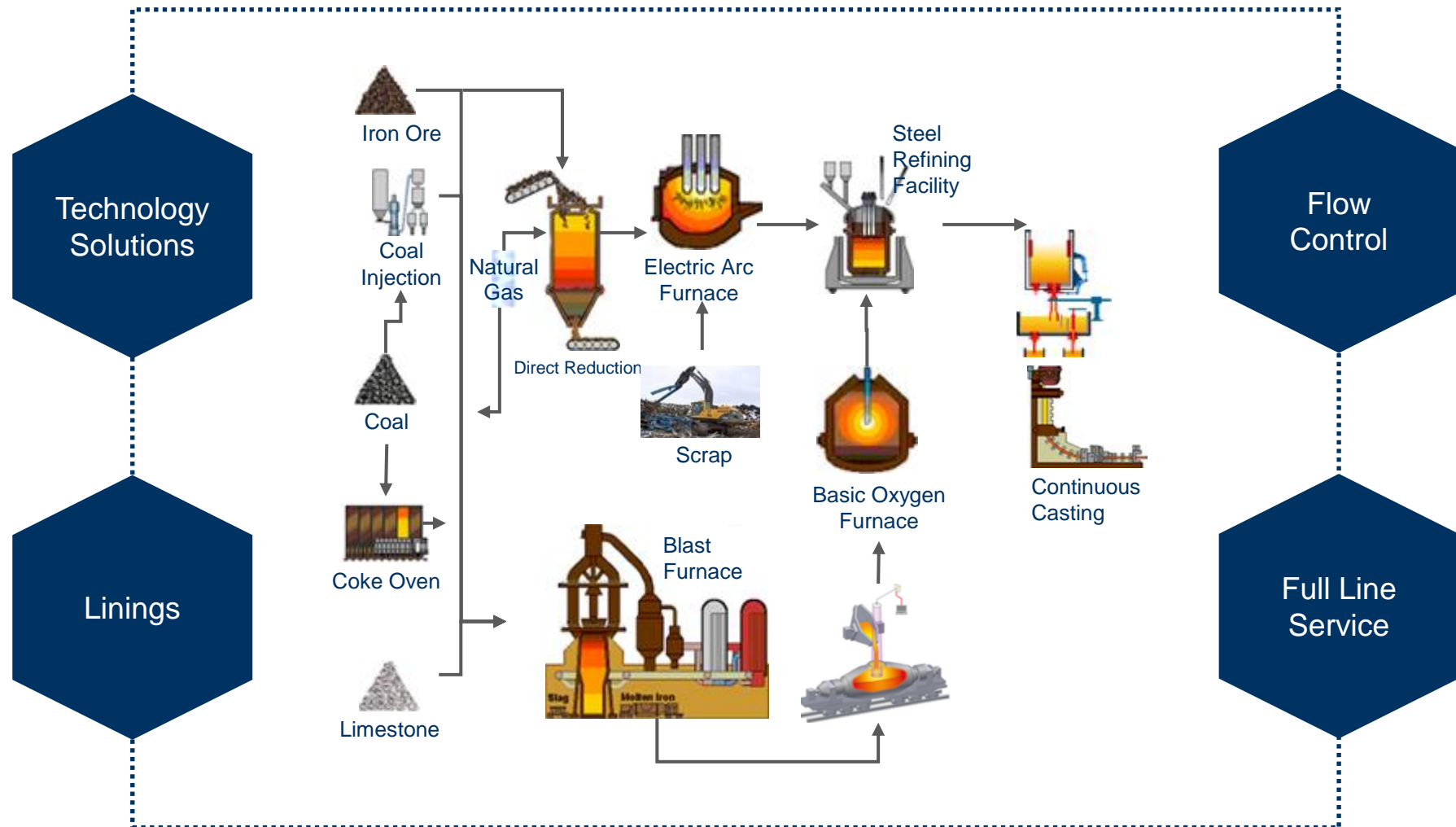
Raw material sites  
in 4 continents

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**€25m**

Annual investment in Research

# Adding value through a full suite of products and services





# Serving blue chip clients in every industry

## Steel



NIPPON STEEL &  
SUMITOMO METAL



## Cement



Votorantim



## Glass



## Metals



Serving 1060 of 1250 plants<sup>1</sup>

Serving 1376  
of 1537 plants<sup>1</sup>

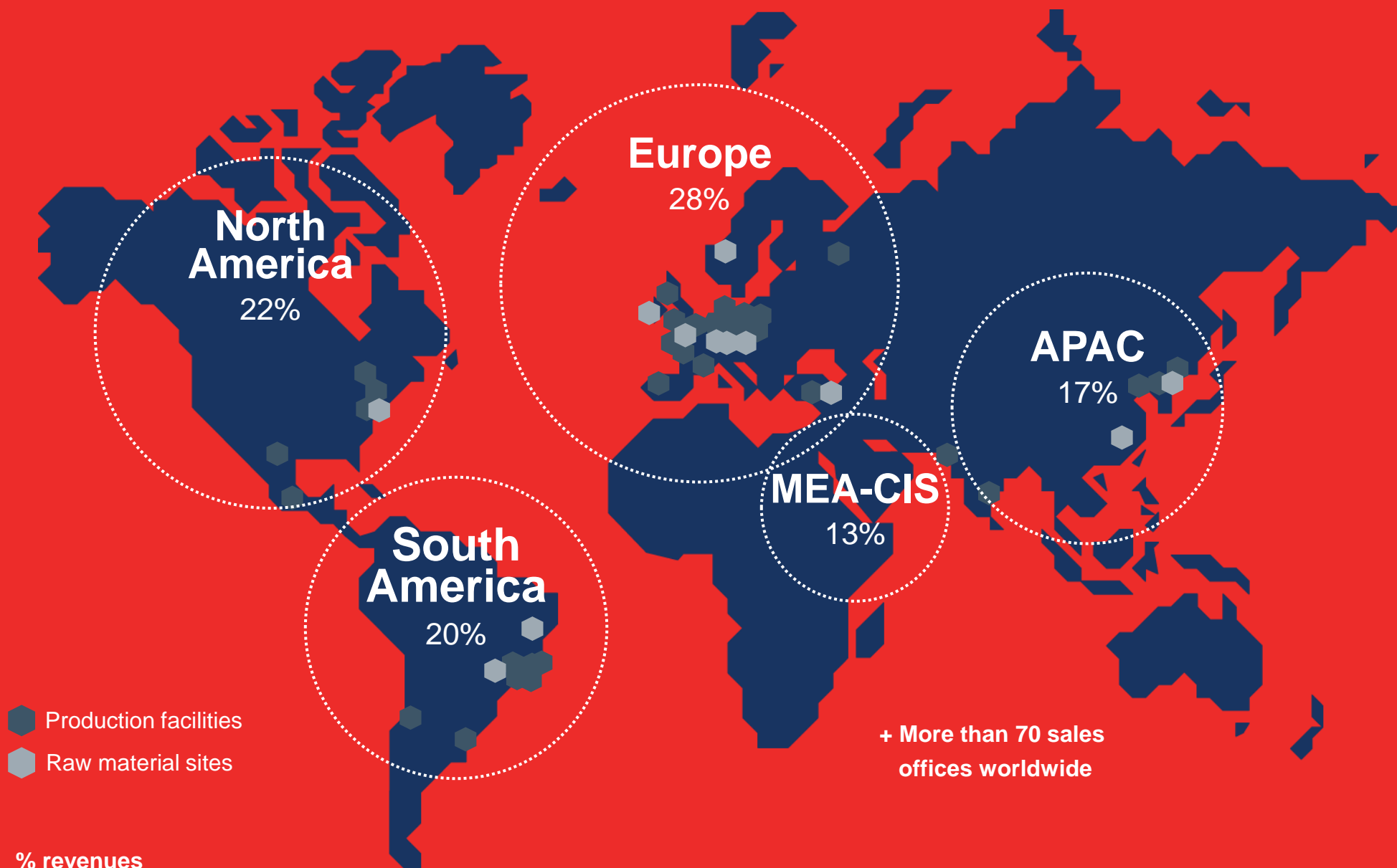
Serving 800  
of 900 plants<sup>1</sup>

Serving 650  
of 2000 plants<sup>1</sup>

<sup>1</sup>ex-China



# Optimally positioned to reach clients everywhere



# Driving client performance improvements

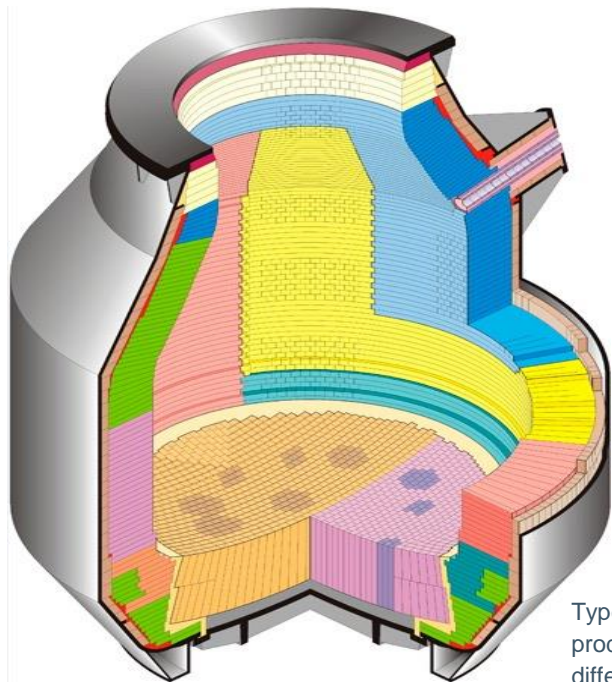
Equipment/Application	Service	Starting point	End game	Improvement
<b>Client A (Integrated)</b>				
Basic Oxygen Furnace (B.O.F.)	Refractories	1,900 heats	7,200 heats	<b>+385%</b>
	Assembly	145 h	40 h	<b>3.8X faster</b>
Blast Furnace	Runners	1,600 h	330 h	<b>4.8X faster</b>
Torpedo Cast	Casting	230 kton metal	640 kton metal	<b>+280%</b>
<b>Client B (Mini Mills)</b>				
EAF	Roof	300 heats	2,100 heats	<b>+600%</b>
	Assembly	27 h	8 h	<b>3.4X faster</b>
	Working Line	360 heats	1,200 heats	<b>+200%</b>
Slide Gate	Refractory	3 heats	9 heats	<b>+200%</b>
<b>Client C (Stainless)</b>				
AOD	Working Line	55 heats	70 heats	<b>27%</b>
EAF	Working Line	200 heats	300 heats	<b>50%</b>
Ladle	Working Line	50 heats	65 heats	<b>30%</b>

Source: RHI Magnesita

# Solutions that maximise efficiency and margins

## Example: Full Line Service

A single basic oxygen furnace (BOF) demands different types of refractories designed according to their distinct physical and thermo-chemical properties



Types of refractory products shown in different colors

One key objective for Full Line Service clients is to develop refractories that last longer and are consumed homogeneously within each equipment for each customer in each plant

Refractory consumption on the converter walls was diagnosed as heterogeneous, potentially leading to premature disposal of other refractories within the converter. Replacing an entire wall would lead to higher downtime of the equipment and more refractory use.

### The solution consisted of:

- Identifying the compromised area in the BOF converter
- Applying lower-cost gunning mixes in order to increase the lifetime of still-good refractories
- Higher refractory efficiency led to higher margins for both RHI Magnesita and the customer
- Finally, refractories were sent for post-mortem analysis and allowed for adjustments to customer process and refractory composition to increase homogeneity

# Tailor-made products and services that drive performance and cost savings

## Example: Implementing Gas Purging in Electric Arc Furnaces for High-Alloyed Steelmaking

Stainless steel production has significantly different EAF process conditions compared to low-alloyed steelmaking due to the oxidation characteristics of Chromium during decarburization of the molten metal



### Benefits of gas purging

- ❑ Decreased melting time of scrap and DRI
- ❑ Increased heat transfer during the superheating period
- ❑ Decreased specific electrical energy demand
- ❑ Enhancing mixing of the steel melt and increasing homogeneity
- ❑ Avoidance of unwanted skull formation or debris
- ❑ Decreased deviation between the measured steel temperature in the EAF and the ladle furnace

### Immediate process improvement and client cost savings

120t EAF	Before	After	Δ
Charged weight (t)	126.3	126.7	+0.4
Tap Weight (t)	122.9	127.9	<b>+5.0</b>
Yield (%)	87.9	92.4	<b>+4.5</b>
FeSi (kg)	290	222	<b>-23%</b>
Lime/Dolomite (t)	4.45	4.14	<b>-7%</b>
Power-on time (min)	102	108	<b>+6</b>
Tap Temperature (°C)	1.571	1.572	<b>+1</b>
Energy (kWh/t)	543	526	<b>-17</b>

As a result, the vast majority of customers in high-alloyed and stainless steelmaking now use EAF gas purging as standard technology

# Experienced management team with solid financial and strategic background

Executive Management Team	Joined	Background
<b>Stefan Borgas</b> <i>CEO</i>	2016	<ul style="list-style-type: none"> <li>Former CEO of Israel Chemicals Ltd and Lonza Group</li> <li>Several management positions at BASF</li> </ul>
<b>Octavio Lopes</b> <i>CFO</i>	2012	<ul style="list-style-type: none"> <li>Former CEO of Magnesita and Equatorial Energia</li> <li>Several management positions at GP Investments</li> </ul>
<b>Luis R. Bittencourt</b> <i>CTO</i>	1989	<ul style="list-style-type: none"> <li>Former R&amp;D and raw material VP of Magnesita</li> <li>BA in mining engineering (UFMG), MS degree in metallurgical engineering (University of Utah) and PhD in ceramic engineering (University of Missouri)</li> </ul>
<b>Gerd Schubert</b> <i>COO</i>	2017	<ul style="list-style-type: none"> <li>Former COO of Pfeiderer S.A.</li> <li>Global Operations Director at Ferro Deutschland GmbH and Ferro Spain</li> </ul>
<b>Reinhold Steiner</b> <i>CSO</i>	2012	<ul style="list-style-type: none"> <li>Former CSO Steel Division of RHI</li> <li>Former CEO of Chtpz Group</li> </ul>
<b>Thomas Jakowiak</b> <i>Integration</i>	2000	<ul style="list-style-type: none"> <li>Former CSO Industrial Division of RHI</li> <li>Several leadership positions at RHI</li> </ul>
<b>Simone Oremovic</b> <i>Human Resources</i>	2017	<ul style="list-style-type: none"> <li>19 years of experience in leadership positions in HR, among other fields at GE, Telekom Austria, IBM and Shire/Baxter</li> </ul>
<b>Luiz Rossato</b> <i>Corporate Develop.</i>	2008	<ul style="list-style-type: none"> <li>Former Legal Council, M&amp;A and Institutional VP of Magnesita</li> <li>General Counsel of the Year 2012 by International Law Office</li> </ul>



# Premium UK listing and corporate governance

## Listing in the UK underscores the RHI Magnesita's international scope

- Listed in the Premium Market in the London Stock Exchange
- Strong commitment and full adherence to the UK corporate governance code
- Majority independent Board targetted
- No controlling shareholder (or shareholder agreement)



## Highly valued board members with accretive multi-disciplinary experience

### Executive Directors

**Stefan Borgas** / DE – CEO  
**Octavio Lopes** / BR – CFO

### Non-Executive Directors<sup>1</sup>

**Herbert Cordt** / AT – Chairman  
**David Schlaff** / AT  
**Stanislaus zu Sayn-Wittgenstein** / DE  
**Fersen Lambranh**o / BR

#### Independent:

**Jim Leng** / UK – Senior Independent Director  
**Ms Celia Baxter** / UK – Chair Remuneration Committee  
**John Ramsay** / UK – Chair Audit Committee  
**Andrew Hosty** / UK  
**Wolfgang Ruttenstorfer** / AT  
**Karl Sevelde** / AT  
 One position to be nominated

### Board Committees

Remuneration

Corporate  
Responsibility

Nomination

Audit &  
Compliance

<sup>1</sup>An additional six Non-Executive Directors shall be appointed by employee representatives from various EEA Member States



# Building a global leader in refractories

# A strategic combination that captures synergies and drives efficiencies

## Establish leading market position



- Complementary asset portfolio
- Transaction to support regional growth in several markets, especially in South America, the United States and Asia
- Strengthening competitive position against consolidating Chinese refractory industry

## Leverage technology capabilities



- Enhanced value-added products and solutions best fitting customer needs
- Strong, globally recognized brands associated with high-quality products and services
- Innovative technology and best in class R&D

## Strengthen geographic cluster



- Valuable assets enhancing combined global footprint
- Economies of scale in important operational areas
- Increased proximity to customers and shorter lead-times

## Retain raw material integration



- Global raw material network to smooth out demand volatility and reduce capital requirements and logistic costs
- Highest level of vertical integration in the industry with unique raw material sources

**Capture synergies and drive cost efficiencies**



# The industry's largest dedicated research team, pushing the boundaries of what is possible

We drive innovation in every aspect of our business, from materials, robotics and Big Data, to bespoke new business models and efficient new processes, under extreme conditions.

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## Refractories

- Development and optimization of refractory products and manufacturing processes
- Market driven project portfolio
- Plant technical support and quality control

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## Mineral

- Increase ore recovery, maximize mine useful life and minimize environmental impacts
- Development of high quality, low cost raw material sources

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## Basic research

- Basic research ensuring technology leadership
- Strong focus on innovation

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## Recycling

- Green technology applied to reprocessing, sorting and reutilization of recycled raw material

Global research team of 270+ employees, of which 98 have masters and PhDs, working out of 2 research hubs and 3 centers



# On-site technical experts consult, develop and deliver innovative solutions directly to clients

**340+ technical engineers across 90 countries**, working on-site with clients to provide custom-made solutions, installation support, recycling, post-mortem analysis and more.

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## A combination of...



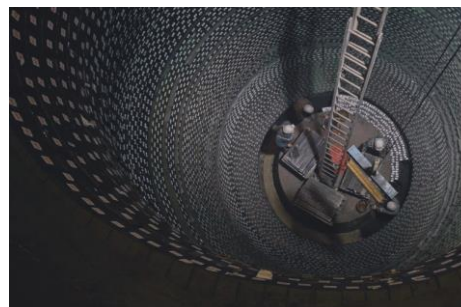
High quality raw materials



Continuous investments in R&D



World-class products



On-site technical consulting

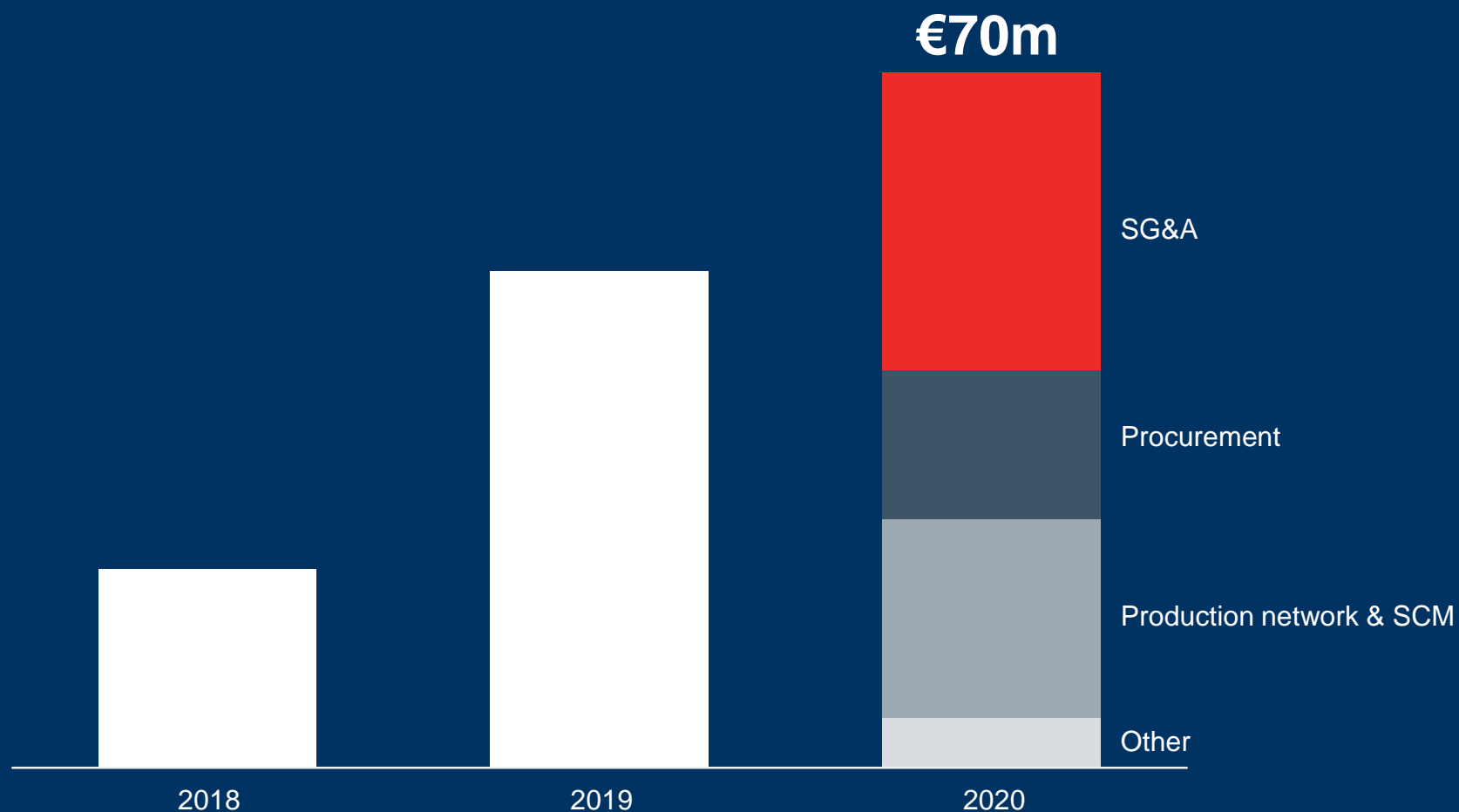
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## ...ensures customers

- ☐ Improve efficiency
- ☐ Improve quality
- ☐ Increase productivity
- ☐ Reduce costs
- ☐ Reduce working capital
- ☐ Reduce energy and other raw materials consumption



## Incremental synergies to be phased over three years, reaching a recurring run-rate of €70m by 2020



## Synergy opportunities across a range of business activities

<b>SG&amp;A</b>	<ul style="list-style-type: none"><li>□ Rationalization of sales network</li><li>□ Streamlining corporate management and back-office</li><li>□ Ramp-up of shared service centers</li></ul>
<b>Procurement</b>	<ul style="list-style-type: none"><li>□ Best sourcing prices in overlapping countries and spend categories</li><li>□ Beneficial scale effect from high volumes</li><li>□ Increase vendor financing</li></ul>
<b>Production Network and Supply Chain</b>	<ul style="list-style-type: none"><li>□ Network rationalization, enhancing distribution, reducing logistic costs and lead-time and improving capacity utilization</li><li>□ Reallocate complementary product portfolios</li><li>□ Enhanced raw material integration</li></ul>
<b>Others</b>	<ul style="list-style-type: none"><li>□ Cross-selling opportunities</li><li>□ Product master-data homogenization</li></ul>

## Additional ‘below the line’ synergies are expected post-integration

	Key metrics	Opportunities
Capex	 <b>€124m<sup>1</sup></b>	<ul style="list-style-type: none"> <li>□ Footprint optimization and plant closures/sales to reduce capex requirements</li> <li>□ Assets sales to lighten capital requirements without affecting client service</li> </ul>
Working Capital	 <b>26% of annualized sales<sup>2</sup></b>	<ul style="list-style-type: none"> <li>□ Reallocate production and shorten supply chain</li> <li>□ Replace third party raw materials with internal production</li> <li>□ Eliminate inventory overlap in key countries (Brazil, Mexico, United States)</li> </ul>
Interest Expenses	 <b>~€50m (estimated post-closing)</b>	<ul style="list-style-type: none"> <li>□ Refinance facilities to take advantage of enhanced credit profile</li> <li>□ Use cash flows to delever company and reduce capital structure burden overall</li> <li>□ Target investment grade rating</li> </ul>

<sup>1</sup>:Proforma 2016; <sup>2</sup>:Combined 2Q17 working capital divided by 2Q17 LTM combined revenue



RHI MAGNESITA

# Strategy

# Build a global refractory leader with a distinctive customer proposition based on technology and cost competitiveness to ensure manufacturing of essential materials for the world



## Markets

Worldwide presence with strong local organizations and **solid market positions** in all major markets



## Competitiveness

Cost competitive and **safe production** network supported by **lowest cost G&A** services



## Portfolio

**Comprehensive refractory product portfolio** including basic, non-basic, functional products and services in **high performance segments**



## People

Hire, retain and motivate **talent** and nurture a **meritocratic, performance-driven, client-focused friendly culture**



## Technology

**Top solution provider** in the refractory industry with an extensive portfolio based on **innovative technologies and digitalization**

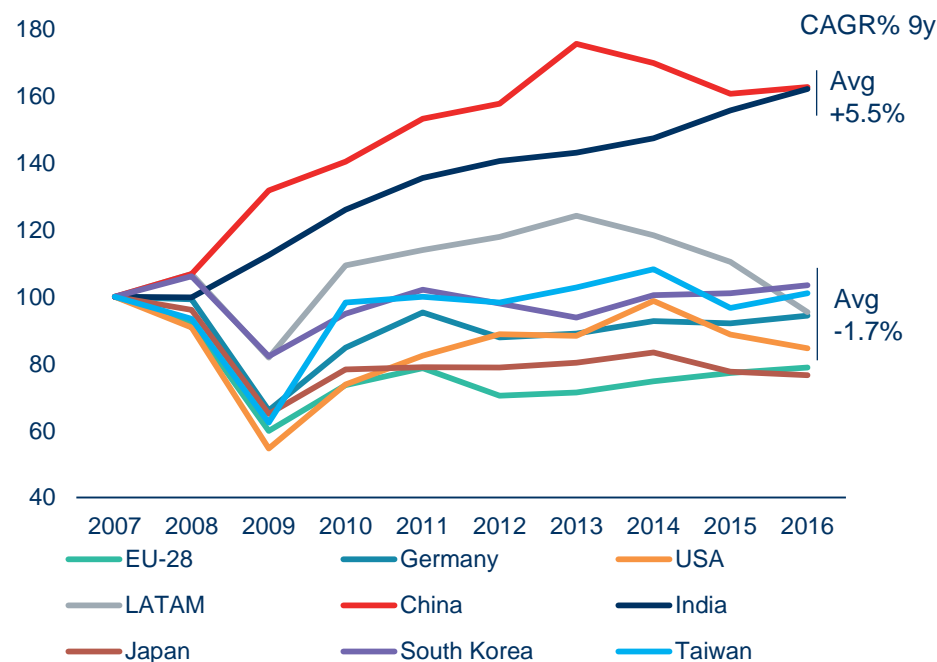


# Aim to achieve worldwide market coverage with strong local organizations and significant market positions

- **Dedicated strategy for China** with focus on growing locally, to achieve sustainable and profitable revenue growth
- **Focus on organic growth in India** (high quality demand) and **US** based on positive local market development
- **Drive organic growth in the mid term** and in the long run consider M&A to achieve overall global presence

## Increasing steel demand in China and India

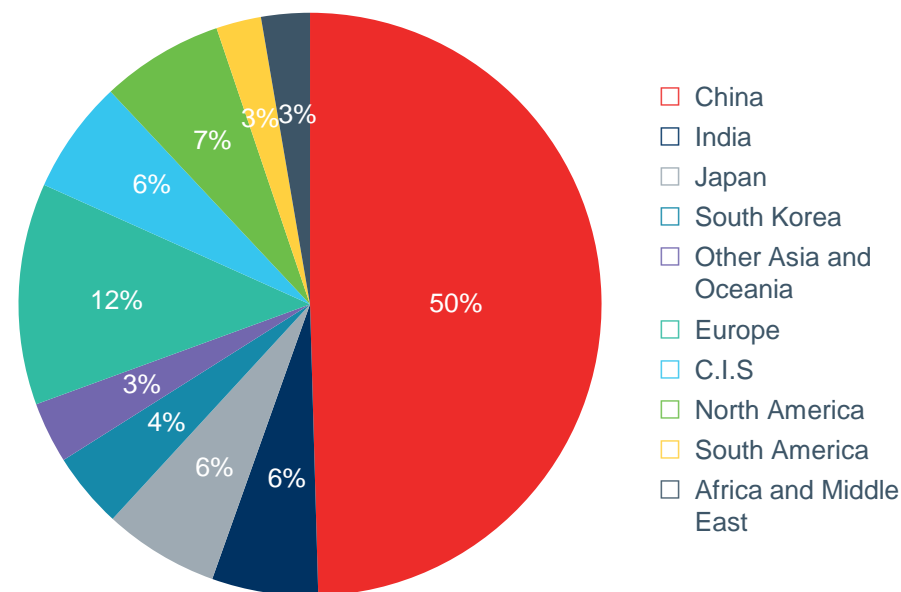
Historic Steel Production (Base 100)



Source: WSA

## Significant opportunity in China

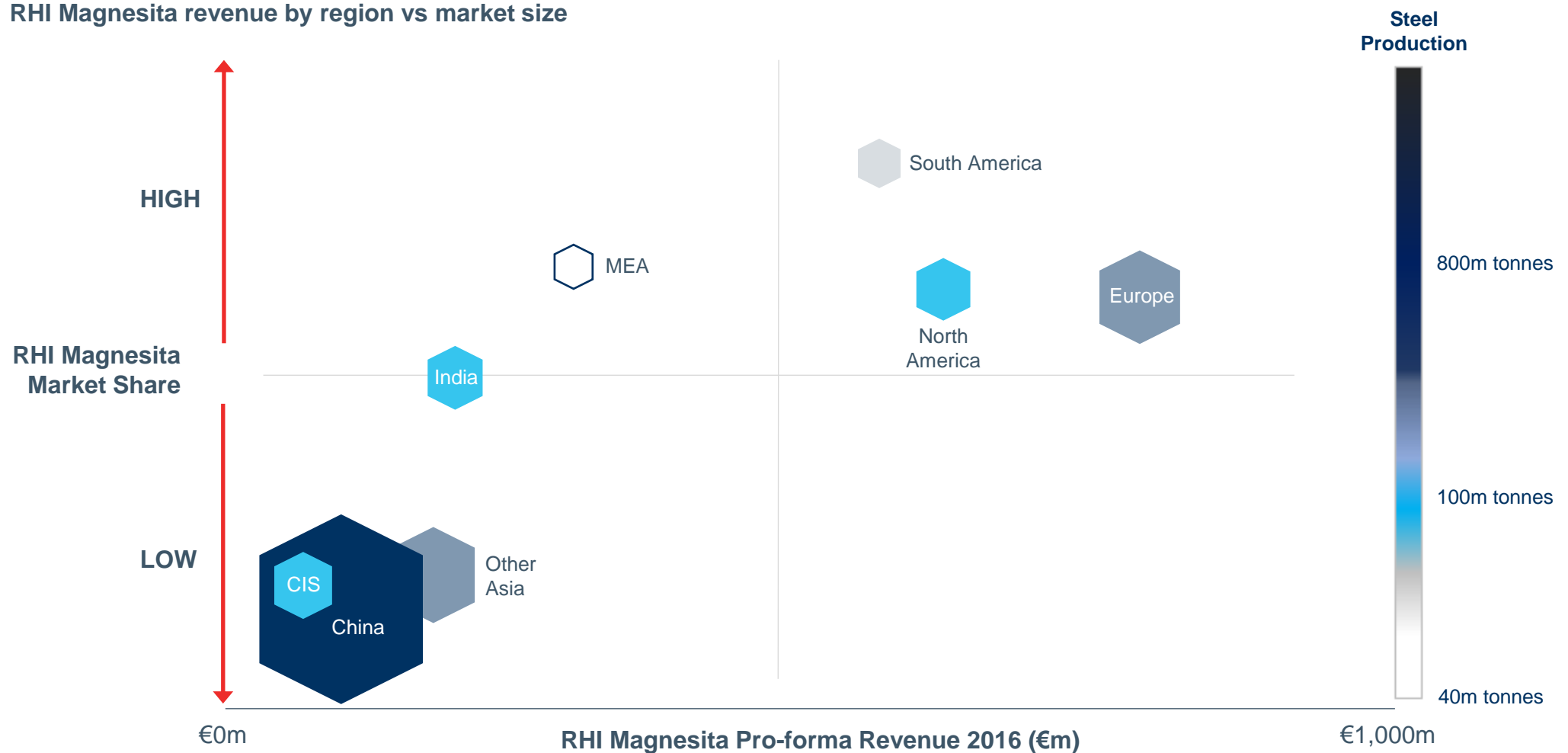
Steel Production by region (2016)



Source: WSA

# Strong share in Europe and Americas with opportunities to occupy 'white spaces' in India, China and CIS

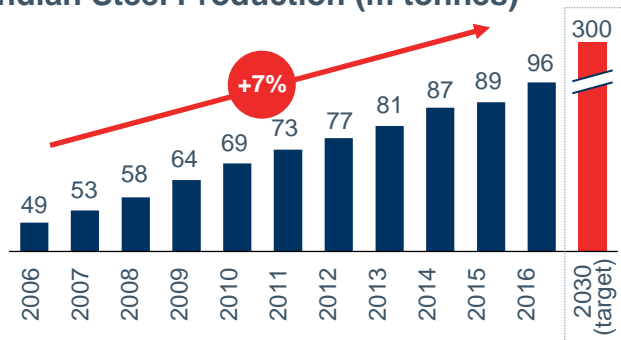
RHI Magnesita revenue by region vs market size



# Well-positioned to tap expanding refractory demand in India

- India became the **3rd largest steel producer in the world** after a decade of solid growth

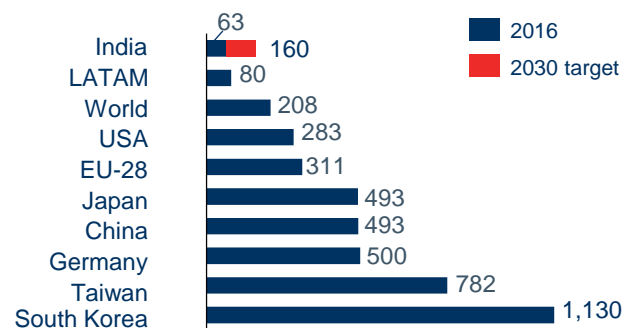
## Indian Steel Production (m tonnes)



Source: WSA and National Steel Policy 2017 (Indian government)

- An ambitious government program aims to reach **300m tonnes of steel production by 2030**, triple 2016 output

## Per capital steel consumption (Kg)

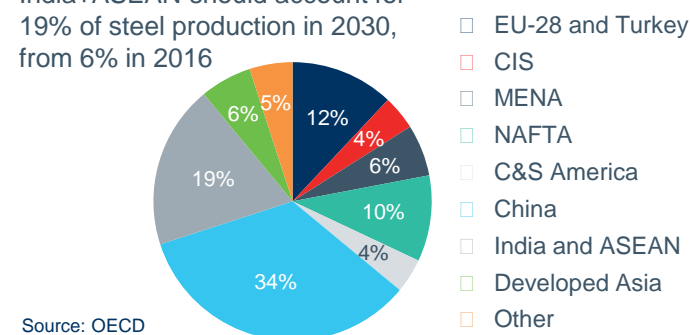


Source: WSA and National Steel Policy 2017 (Indian government)

- Per capita consumption should increase from 63kg (2016) to 160kg

## Steel demand outlook 2030

India+ASEAN should account for 19% of steel production in 2030, from 6% in 2016



Source: OECD

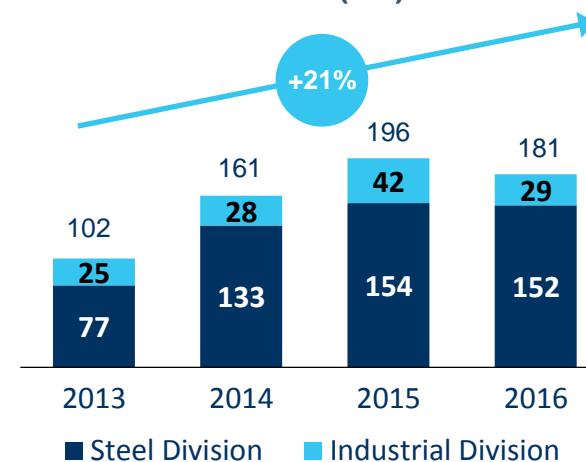
## Market advantage in local presence



## Relationship with blue-chip customers



## Solid revenue stream (m€)



# Move to high-value added solutions in China

## China

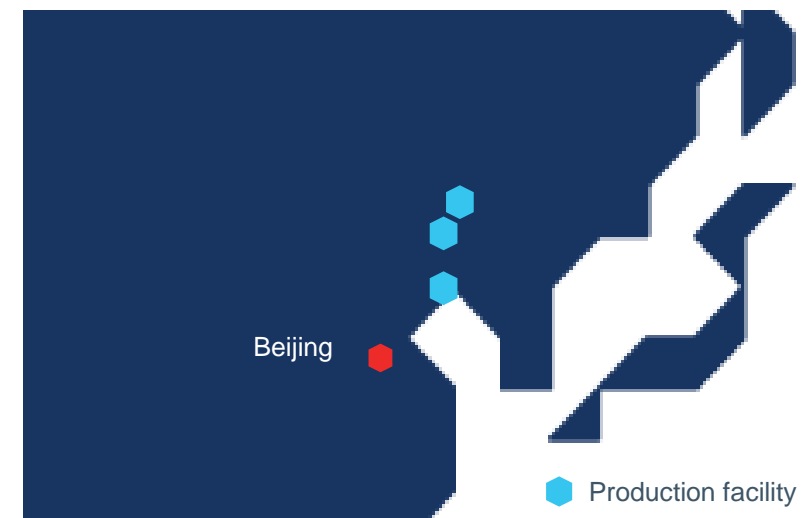
### Market Dynamics

Despite lower overall steel demand outlook for 2030, steelmakers are converging to high-value added solutions in order to improve margins

- Long-term chinese market consolidation is expected to lead to shift towards high grade refractories
- Chinese market transition from long steel to flat steel presents a growth opportunity
- Specialty segment demand for 2020 is estimated to increase 5%
- EAF application is expected to double from ~50 million tons in 2015 to ~100 million tons in 2020

### Opportunities

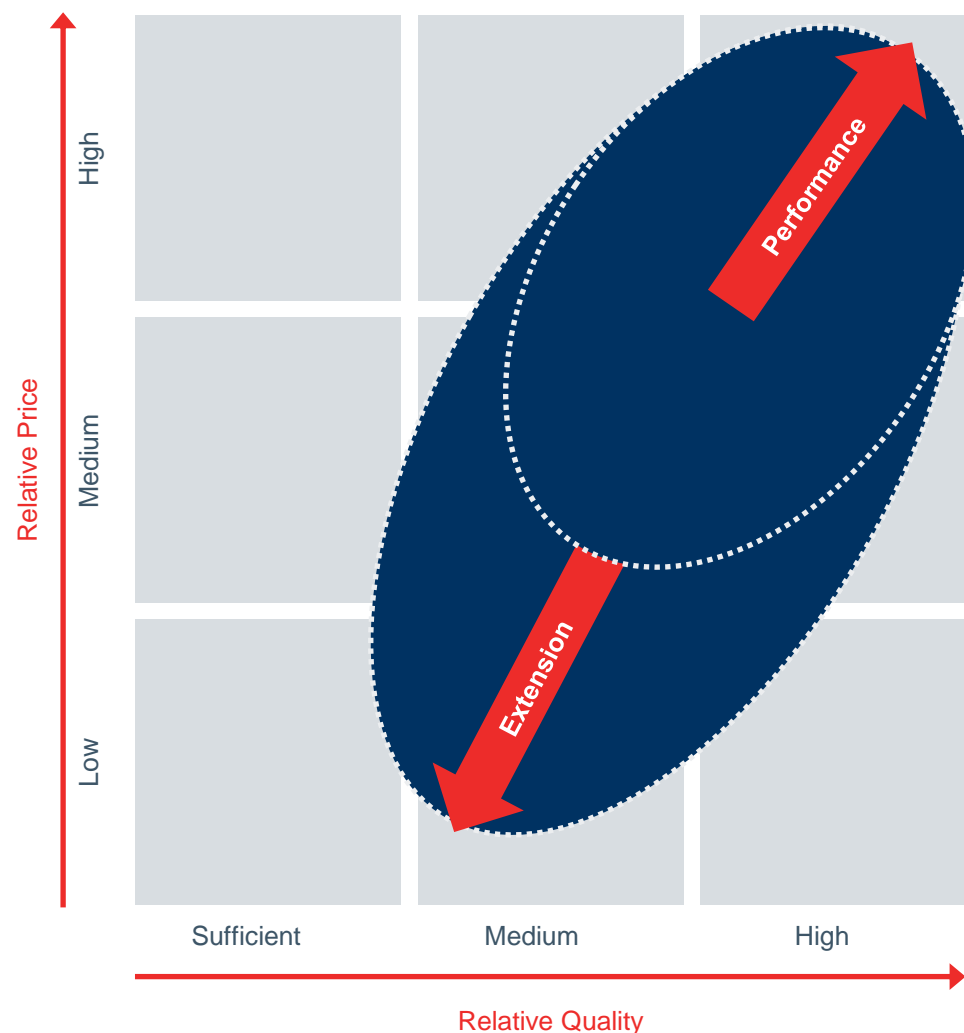
- Leader in EAF solutions outside China (~20% mkt share in N.A. & ~15% in Europe)
- Specialized in high grade refractories ranging from non-basic products to flow control
- Local supply grants logistical competitive advantage to tap regional market



## Extending existing comprehensive portfolio further into high performance customer segments

RHI Magnesita has the broadest and deepest portfolio in the industry, covering basic, non-basic and functional products and services in high performance segments.

- **Extend current market position in high end/quality application** through product portfolio extensions
- Develop opportunities to **strengthen non-basic mixes and functional products**
- Continue **ECO strategy for price sensitive customer segments** with a competitive offering
- Strengthen country specific product offering (China, India, etc) to **serve specific local needs**





# Extend market position in high quality applications and strengthen non-basic mixes and functional products

Portfolio	Main Applications	Opportunity
<b>Basic Products</b>	<ul style="list-style-type: none"> <li>□ <b>Steel:</b> converters and ladles</li> <li>□ <b>Industrial:</b> Non-Ferrous Metals</li> </ul>	<ul style="list-style-type: none"> <li>□ Great capability and logistics: Production in all continents and short lead-time to everyone, everywhere</li> <li>□ RHI Magnesita, for example, produces world-class mag-carbon bricks. The combination of the best raw materials with the continuous investments in R&amp;D allowed the Company to develop a high-performance product which enhances clients productivity</li> </ul>
<b>Non-basic products</b>	<ul style="list-style-type: none"> <li>□ <b>Steel:</b> blast furnace &amp; reheating furnaces and direct reduction</li> <li>□ <b>Industrial:</b> bricks &amp; castables</li> </ul>	<ul style="list-style-type: none"> <li>□ Estimated global market of €4 billion+</li> <li>□ RHI Magnesita has a complete non-basic product portfolio</li> <li>□ Strong presence in South America. Great opportunity to expand in North America and Europe</li> </ul>
<b>Functional Products</b>	<ul style="list-style-type: none"> <li>□ <b>Steel:</b> continuous and ingot casting</li> <li>□ <b>Industrial:</b> Non-Ferrous Metals</li> </ul>	<ul style="list-style-type: none"> <li>□ Technical expertise, complete product portfolio, solutions beyond refractory products such as mechanisms</li> <li>□ A global plant footprint allows optimization of supply chain</li> <li>□ Continuously growing business with a combined market share globally ~20%; significant growth potential</li> </ul>
<b>Engineering Solutions</b>	<ul style="list-style-type: none"> <li>□ <b>Steel:</b> tundish efficiency improvement</li> <li>□ <b>Industrial:</b> raw material testing &amp; experimenting</li> </ul>	<ul style="list-style-type: none"> <li>□ Service provider and strong partner with the capability to provide solutions beyond refractories</li> <li>□ Tailor made solution for all customer requirements</li> <li>□ Simulations and modelling for improvement of customer processes (water modelling; fluid dynamics)</li> </ul>

## Top solution provider in the industry, investing in innovative technologies and digitalization

1

**Continue investing in R&D** to create products, which have a distinct competitive advantage by costs or by product performance

2

**Accelerate digitalization** across the value chain to create additional value for our customers and our company

3

Introduce new models and **innovate towards Refractory 4.0**

4

Develop into a **complete system supplier** based on R&D, partnerships and selective acquisitions

5

**Extend automation** using machines, manipulators and sensors

## Cost competitive and safe production network supported by lowest cost G&A services

- **Create a sustainable competitive cost production** base through the most efficient usage of the global production footprint
- Run the **lowest cost G&A services** to support the daily business
- Strictly implement and safeguard **achievement of operational synergies** from M&A
- **Demonstrate best practices in all business areas** along the entire value chain geared to competitiveness
- Improve **efficiency and invest selectively** to support growth ambitions
- Use global supply chain footprint to **adapt to freight cost and FX changes tactically** for cash flow maximisation



# Unrivalled competitive advantage through vertical integration, in multiple sites



Raw material	Production sites	Annual production
<b>Standard DBM</b> 90%-97%	Brumado – Brazil Eskisehir – Turkey Hochfilzen – Austria Drogheda – Ireland Breitenau – Austria	~760 k tonnes
<b>High purity DBM</b> 97%+	Brumado – Brazil Dashiqiao – China <sup>1</sup>	~280 k tonnes
<b>Fused Magnesia</b>	Dashiqiao – China <sup>1</sup> Radenthein – Austria Porsgrunn – Norway Contagem – Brazil	~110 k tonnes
<b>Other sintered or fused materials</b>	Radenthein – Austria Contagem – Brazil Trieben – Austria	~50 k tonnes
<b>DBD</b>	York – USA Nameche – Belgium <sup>1</sup> Acaba Mundo – Brazil	~400 k tonnes

**1.6 million**

tonnes of raw materials produced per year

**70%+**

vertical integration in basic raw materials and 50%+ for all raw materials

**Certainty of supply**

**High quality materials**

**Cost competitiveness**

<sup>1</sup> Joint ventures



# Financials

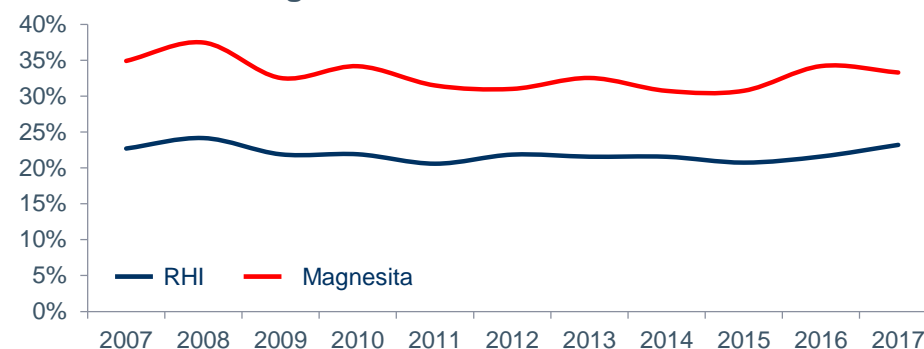




# Resilient business model

	Basic Materials	RHI Magnesita
Raw Materials	<ul style="list-style-type: none"> <li>Commoditized</li> <li>Price takers of key raw material inputs</li> </ul>	<ul style="list-style-type: none"> <li>Low volatility in cost due to significant vertical integration</li> </ul>
Finished Product	<ul style="list-style-type: none"> <li>Commoditized</li> <li>Price takers of standardized finished products</li> </ul>	<ul style="list-style-type: none"> <li>Non-commoditized</li> <li>Over 100,000 SKUs</li> <li>1-3% of client's COGS</li> <li>Service intensity</li> <li>Make to order</li> <li>Resilient &amp; uncorrelated prices</li> </ul>

## Historic Gross Margin<sup>1</sup>



## Historic Commodity Prices

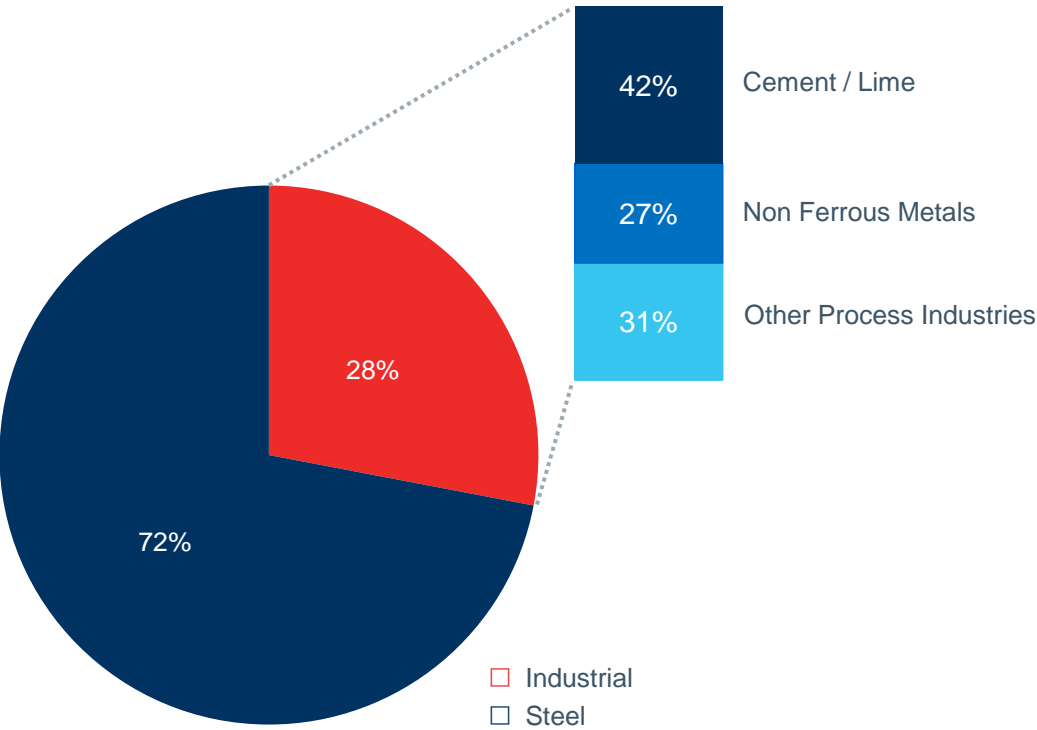


1: Gross margin as reported by RHI and Magnesita in their respective Financial Statements. Prior to the combination, Magnesita included freight in Selling expenses, rather than COGS.

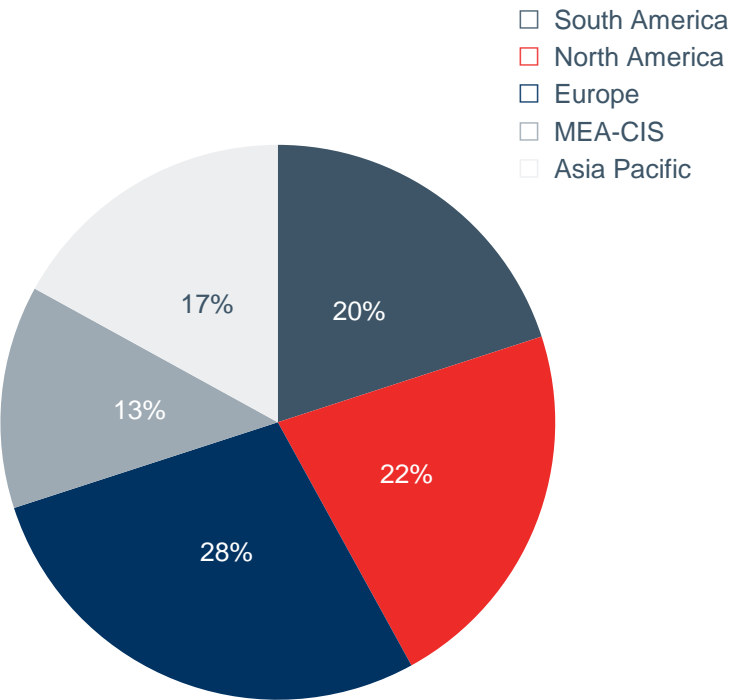
Source: Asian Metal; Bloomberg Steel benchmark (usd/ton)

# Pro-forma financials

Revenue<sup>1</sup> by Industry



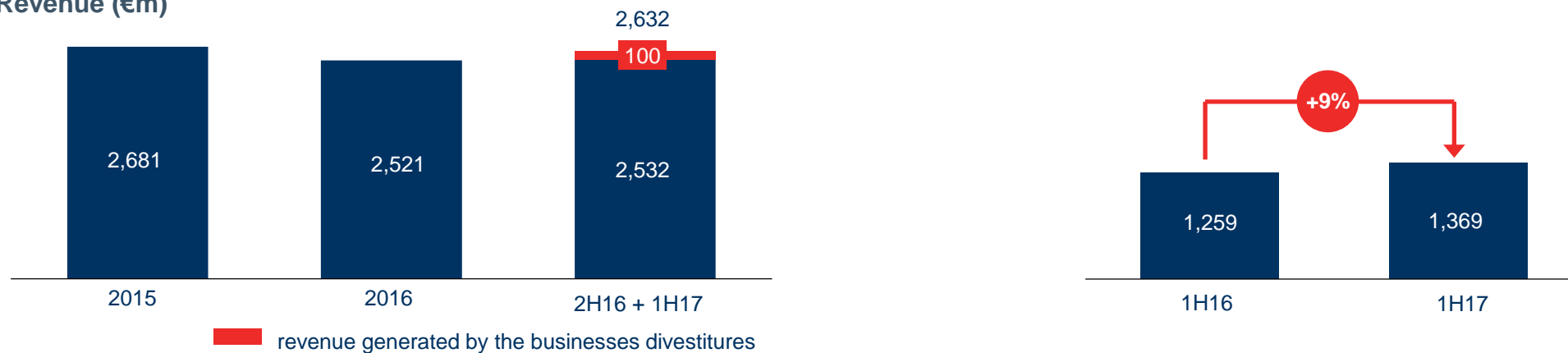
Total Revenue by Geography



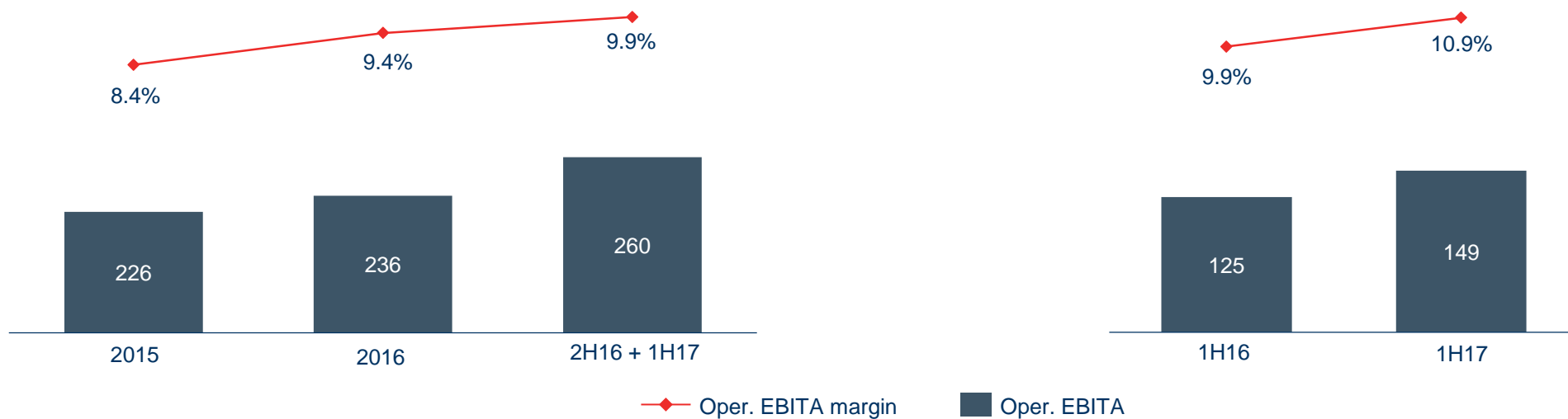
<sup>1</sup> Revenue split considers only refractory segments and does not take into account the effect of any divestitures.

# Pro-forma financials

## Revenue (€m)



## Operating EBITA (€m)



## Selected financial highlights

	2015	2016	1H16	1H17	2H16 + 1H17
Revenue	2,681	2,521	1,259	1,369	2,632
COGS	-2,032	-1,867	-932	-1,000	-1,935
<b>Gross Profit</b>	<b>649</b>	<b>654</b>	<b>327</b>	<b>369</b>	<b>697</b>
Selling	-237	-230	-112	-124	-242
G&A	-198	-209	-96	-115	-228
<b>Operating EBITA</b>	<b>226</b>	<b>236</b>	<b>125</b>	<b>149</b>	<b>260</b>
<b>Operating EBITA margin</b>	<b>8.4%</b>	<b>9.4%</b>	<b>9.9%</b>	<b>10.9%</b>	<b>9.9%</b>
Depreciation	105	94	44	48	97
<b>Operating EBITDA</b>	<b>331</b>	<b>329</b>	<b>169</b>	<b>197</b>	<b>357</b>
<b>Operating EBITDA margin</b>	<b>12.4%</b>	<b>13.1%</b>	<b>13.5%</b>	<b>14.4%</b>	<b>13.6%</b>

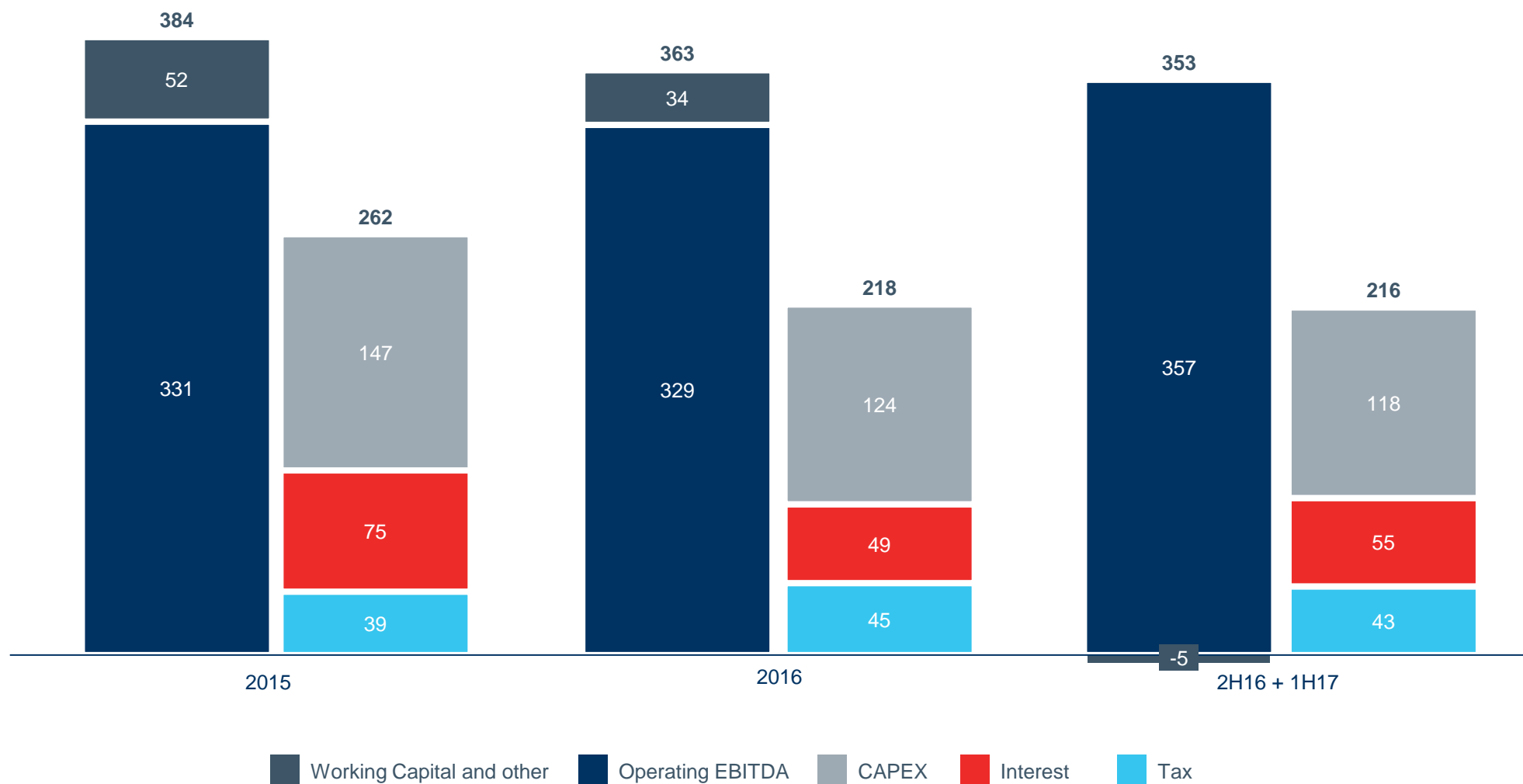
**Operating EBITA** = EBIT excluding amortization costs, goodwill/fixed asset impairments, FX variation, M&A/transaction costs, losses from derivative supply contracts recognized as per IAS 39 and other revenue/expenses

**Operating EBITDA** = Operating EBITA excluding depreciation expenses

<sup>1</sup>Financial highlights are based on combined RHI and Magnesita stand-alone financial income statements, as per the Prospectus F-pages.

## Combined cash flow

Strong cash flows from operations supported by synergies and organic growth opportunities

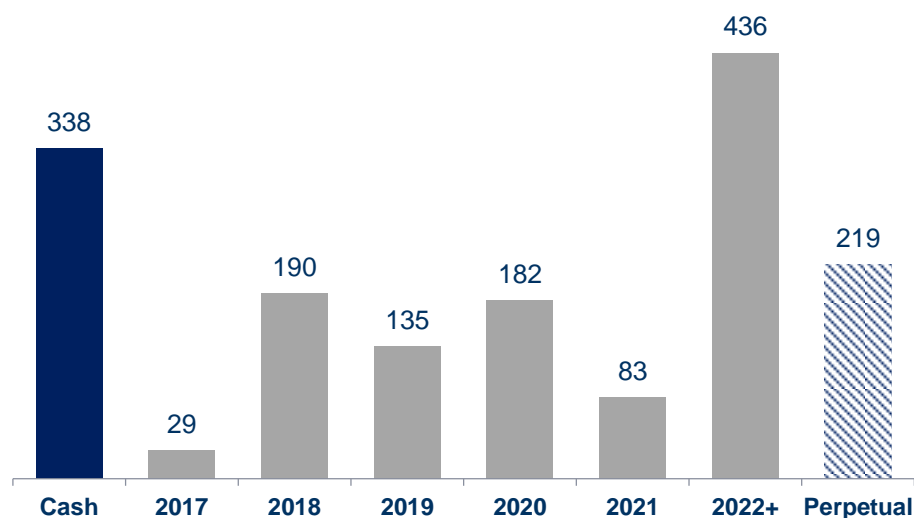




# Capital structure

## Solid credit profile and commitment to rapid de-leveraging

<b>Liquidity and Duration</b>	<ul style="list-style-type: none"> <li>Strong cash position, sufficient to cover amortizations for the next 2 years</li> <li>Comfortable 5yr average duration, with perpetual bond representing ~25% of net debt</li> </ul>
<b>Leverage</b>	<ul style="list-style-type: none"> <li>Deleveraging supported by strong operational CF, asset divestitures, synergies and WK reduction</li> <li>Stable dividend in regards to 2017 and 2018 financial years</li> </ul>
<b>Covenants</b>	<ul style="list-style-type: none"> <li>Flexible covenant package, excluding restructuring charges</li> <li>Significant covenant headroom to support deleveraging</li> </ul>



Capitalization Table <sup>1</sup>	€ millions
Schuldscheindarlehen	178
Term Loan	267
Perpetual Bond	219
Other Loans & Facilities	609
<b>Total Gross Indebtedness</b>	<b>1,274</b>
Cash & Marketable Securities	338
<b>Net Debt</b>	<b>936</b>
<b>Leverage</b>	<b>2.62</b>

<sup>1</sup> 2Q17 Pro forma, Adjusted for the Refinancing and the Acquisition of Control, as per Prospectus

# Debt structure

<b>Syndicated Term &amp; Revolving Loan</b> <b>€477m</b>	<ul style="list-style-type: none"> <li>□ €267m drawn on closing</li> <li>□ Additional €110m available for Magnesita Integrated Offer</li> <li>□ Additional €100m revolving facility available</li> <li>□ Spread: Margin grid from 60bps – 275 bps (~180bps at current leverage)</li> <li>□ Maturity: 2022 (fat tail amortization profile)</li> <li>□ Main Financial Covenant: Consolidated leverage &gt;4.0x stepping down to 3.8x by 2020 and 3.5x by 2021</li> </ul>
<b>Schuldscheindarlehen</b> <b>€178m</b>	<ul style="list-style-type: none"> <li>□ Maturity: 85% in 2022 and 15% in 2024</li> <li>□ Spread: 160–190 bps</li> <li>□ No leverage covenants</li> </ul>
<b>Perpetual Bond</b> <b>US\$250m</b>	<ul style="list-style-type: none"> <li>□ Fixed rate of 8.625%</li> <li>□ No leverage covenants</li> <li>□ Callable at par since April, 2017</li> </ul>

# Capital strategy

Dynamic capital allocation over time, supporting long term strategy and shareholder returns

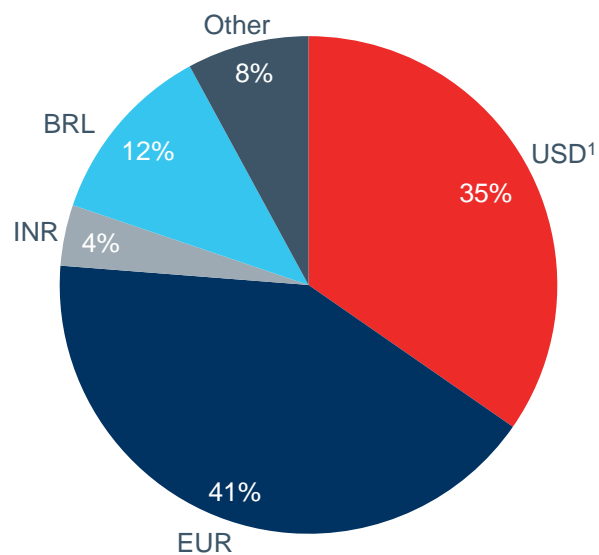


Target leverage below 2.0x operating EBITDA

## P&L per currency

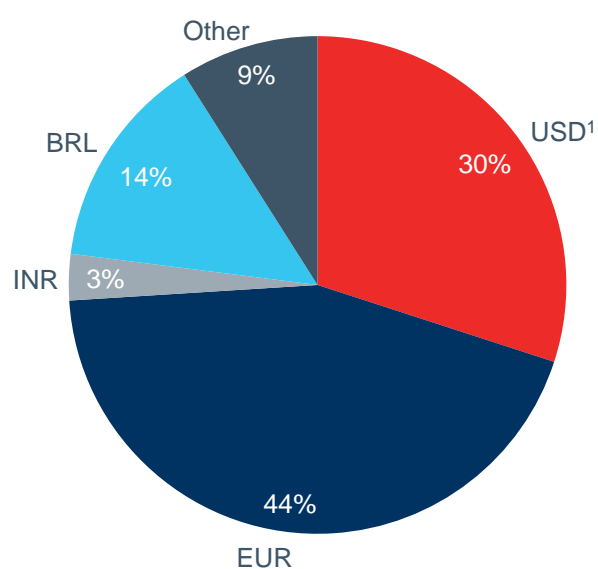
Majority of EBITDA generated in stable currencies

Revenues



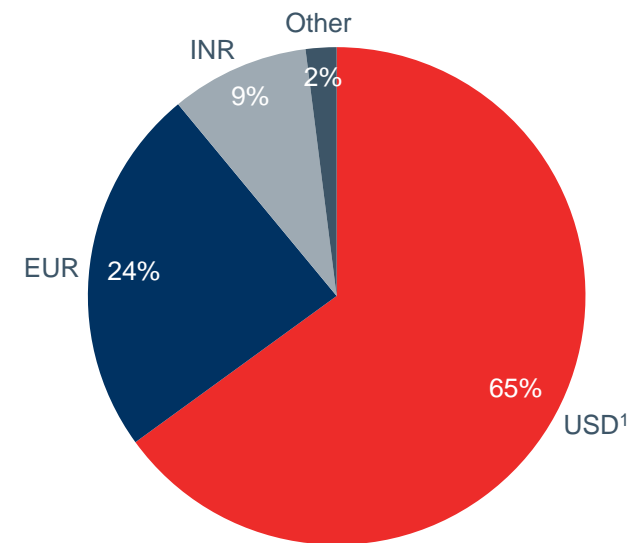
Pro-forma 2016

COGS and SG&A



Pro-forma 2016

Net EBITDA per currency

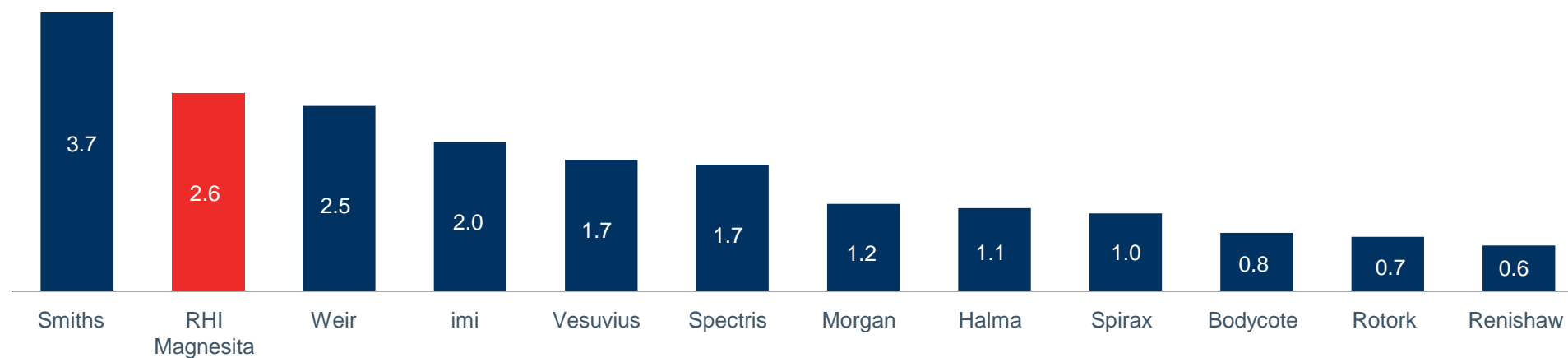


Pro-forma 2016

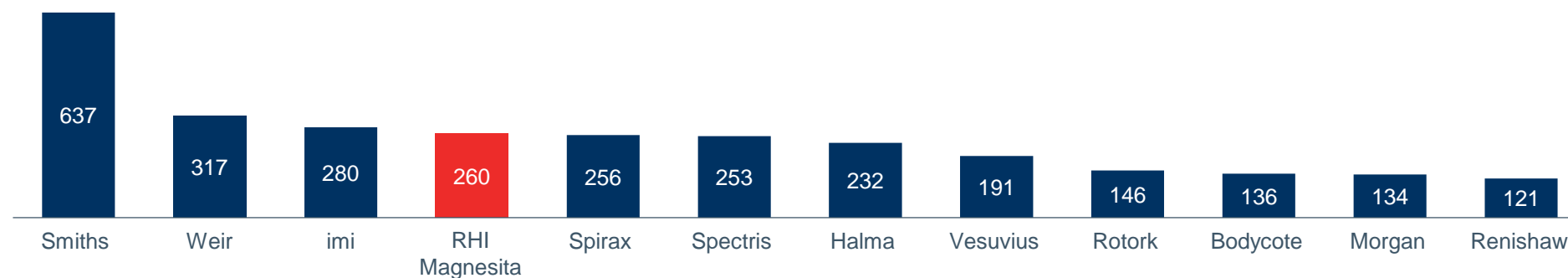
¹USD exposure includes CNY. CNY exposure is ~3% of total revenues and ~11% of COGS + SG&A

# Amongst the leading FTSE 250 industrial companies

Revenue (€ Bn)



EBITA (€ mln)



Source: FY17 market estimates for peers  
RHI Magnesita: 2H16 + 1H17 numbers



# Compelling investment case

1

## Solid strategy and competitive advantages

- Best market position with 15% market share, clear leadership in Americas, Europe and Middle East with broadest value-added solution offering
- Opportunity to develop and leverage technology across regions and portfolio
- Highest level of vertical integration in the industry with unique mineral sources and 50%+ self-sufficiency in all raw materials

2

## Rapid deleveraging and strong cash conversion

- Strong cash flow from operating business supported by synergies and organic growth opportunities
- Cash usage priority on deleveraging within 2 years to reach investment grade rating

3

## Significant synergy potential

- At least €70m EBITA synergies in SG&A, procurement and production network
- Additional “below the line” opportunities in working capital, capex, financing and tax under intensive evolution

**Taking  
innovation  
to 1200°C  
and beyond**



RHI MAGNESITA





RHI MAGNESITA

# Appendix



## Integrated offer overview

- RHIM will launch a tag-along offer to Magnesita's minority shareholders on the same terms and conditions as that made to the Control Group:
  - **Cash + shares:** €117m + 5 million shares
  - **Cash only:** €8.19 per Magnesita share (amounting to €205m)
- Maximum cash consideration fully funded in existing 5-year financing
- RHI Magnesita will combine the Mandatory Tag-along Offer with a delisting tender offer. In these situations, to succeed, at least 2/3 of the remaining shareholders need to agree with the delisting
- ITO shall be launched up to 30 days after London Listing, with conclusion expected for mid-2018



## Merger-control remedies

In June 2017, the European Commission has cleared the Transaction, subject to the divestment of the following assets/business:



Marone, Italy



Lugones, Spain

- Marone and Lugones comprise RHI's entire dolomite business in the EEA
- 2016 Revenue: ~€ 50m



Oberhausen, Germany

- Oberhausen comprises Magnesita's entire magnesia-carbon business in the EEA
- 2016 Revenue: ~€ 50m

□ **€40 million:** consideration for both business

□ **€15 million:** in estimated working capital monetisation

□ **Closing expected by December 2017**



# Operating EBITA reconciliation

Prospectus PDF Pages		2015	2016	1H16	1H17	2H16 + 1H17
144 & 107	Statutory EBIT	-28.7	235.2	118.1	49.2	166.3
107	RHI - Result of derivatives supply contracts	58.0	-10.1	-3.0	1.2	-5.9
107	RHI - Impairment losses	31.2	8.6	0.0	7.2	15.8
107	RHI - Income from restructuring	-5.9	-0.3	0.0	0.0	-0.3
107	RHI - Restructuring costs	3.3	8.9	4.6	1.0	5.3
121/124	RHI - Transaction costs recognised	0.0	12.1	0.2	12.6	24.5
107	RHI - Other income/expenses, net	4.9	-6.5	-4.1	8.6	6.2
144	Magnesita - Other income/expenses, net	150.3	-26.6	2.5	61.9	32.8
279/280/367/368	RHI - Amortization	10.4	10.4	4.9	5.1	10.6
161	Magnesita - Amortization	2.4	4.2	1.8	2.6	5.0
	<b>Operating EBITA</b>	<b>225.9</b>	<b>235.9</b>	<b>125.0</b>	<b>149.4</b>	<b>260.2</b>
278/366	RHI - Depreciation	58.9	54.7	27.5	27.2	54.4
161	Magnesita - Depreciation	46.6	38.8	16.9	20.6	42.6
	<b>Operating EBITDA</b>	<b>331.4</b>	<b>329.4</b>	<b>169.4</b>	<b>197.2</b>	<b>357.2</b>

**Find out more at**  
**[rhimagnesita.com](https://rhimagnesita.com)**

