MIRECO

The key force in closing the cycle

Circular raw materials for the iron and steel industry


The key force in closing the cycle

Content

MIRECO

About MIRECO

MIRECO is the result of RHI Magnesita and Horn & Co. Group joining forces. With our combined expertise, leadership and over 100 years of refractory history, we are able to tackle major challenges of our society and industry such as climate change and resource conservation.

Together with and for our customers we design circular solutions that provide high quality and performance, while saving CO_2 emissions. Join our mission of strengthening the circular economy in European refractories and contribute to transforming the industry.

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Our Claim

Today, recycling is more important than ever. All industries bear the responsibility to use raw materials sparingly. Since 1956 our mission is to improve the life cycle of circular raw materials. For us, reycling is part of our DNA.

Thanks to our many years of experience, exceptionally skilled personnel and passion for what we do, we are the leading specialist for refractory recycling solutions.

To achieve a circular supply chain, it is necessary to use products made out of circular raw materials. We offer our customers the full range of services and products necessary to accomplish a closed raw material recycling cycle. All recycling concepts are individually tailored to our customers and based on our innovative CERO WASTE-Concept.

Circular raw materials for the iron and steel industry

Carefully prepared, used refractory materials, either individually or in combination with commercially available primary raw materials, form the basis for a wide range of circular raw material substitutes for metallurgical purposes: slag formation, slag fluxing, influencing the slag composition and thermal covering agents. Circular raw material concepts that match the process in terms of quality, availability and environmental compatibility are developed in close cooperation with you the customer.

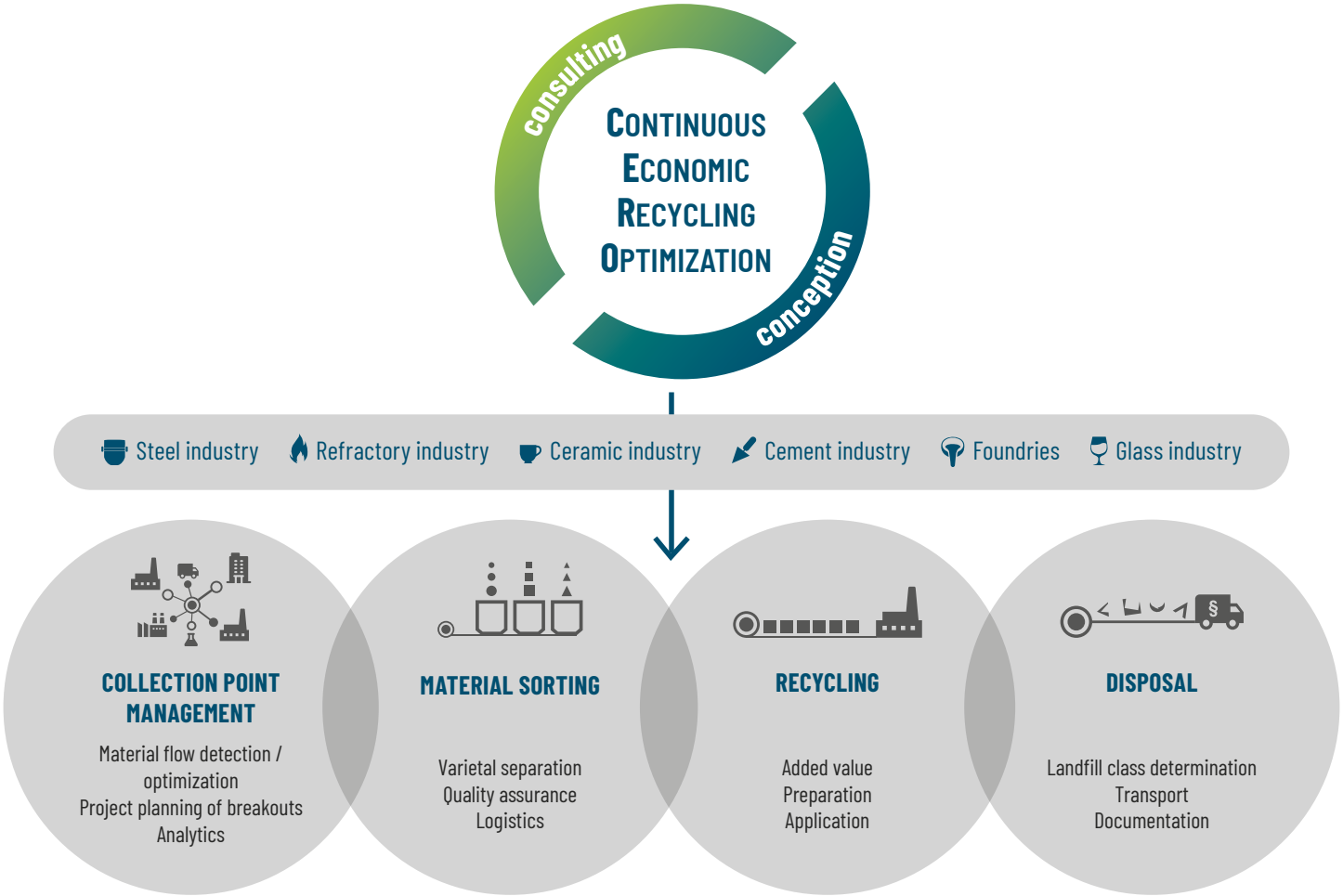
We provide you with circular raw materials that have been obtained in accordance with our CERO (Continuous Economic Recycling Optimization) WASTE-Concept in accordance with the highest quality standards of refractory processing.

CERO WASTE-Concept

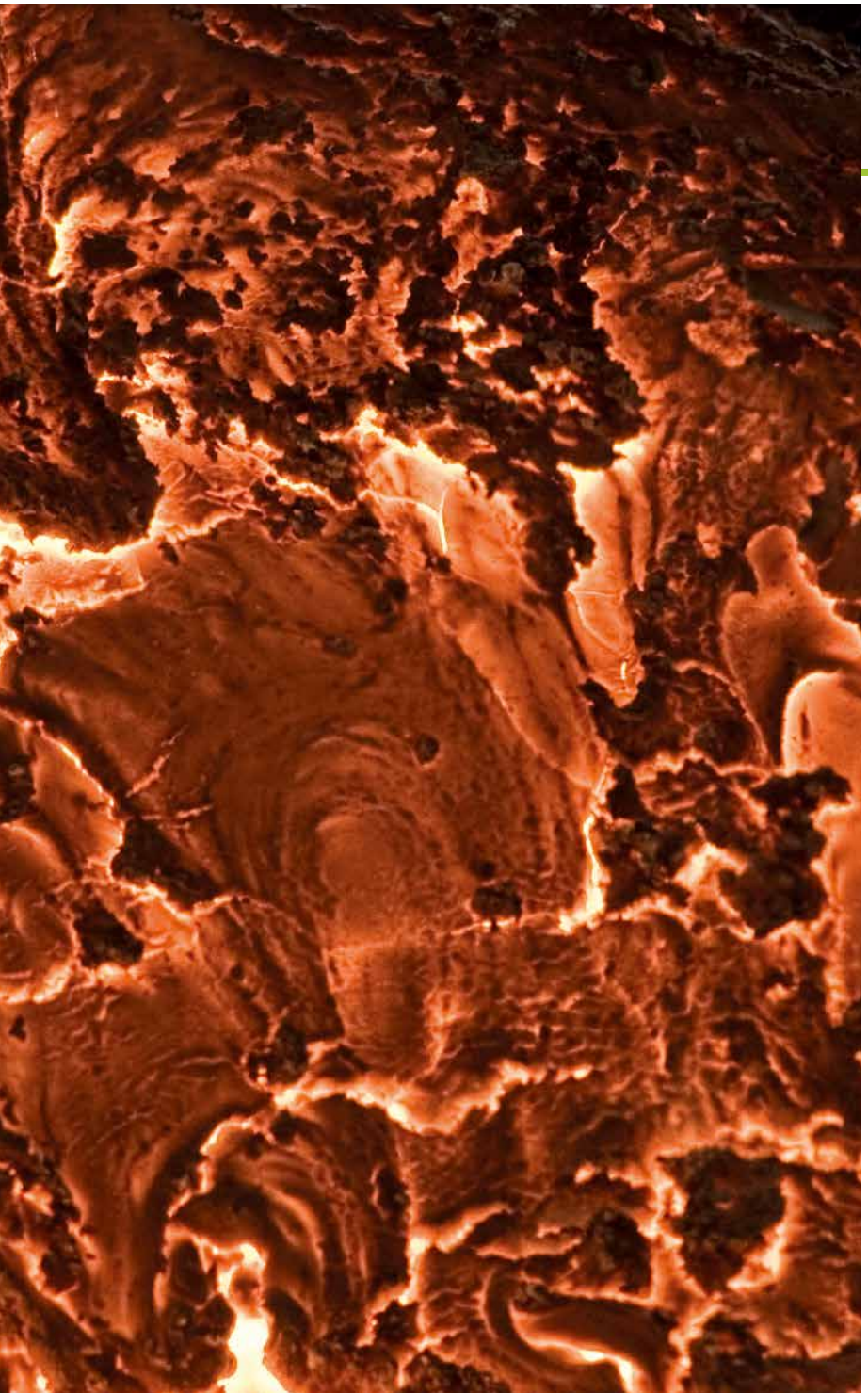
Our CERO WASTE-Concept enables you to make the principle of closed-loop recycling a key business success factor.

Together with our customers we give our used products a new lease of life which then re-enters the supply and value chain. Waste never enters landfill, enabling you to use resources responsibly and increase security of supply.

Our concept complies with the European Waste Framework Directive, guaranteeing process and legal security in terms of analysis, transport, documentation and disposal of waste.



Scan QR-Code and learn more.



Basic raw materials

MgO 55

Raw material base
Magnesia, magnesia-carbon and dolomite bricks

Application examples
Slag forming agents, slag conditioners

MgO	CaO	Fe_2O_3	Al_2O_3	SiO_2	C
55.0 %	20.0 %	5.0 %	10.0 %	5.0 %	8.0 %

MgO 80 A7

Raw material base
Magnesia-spinell

Application examples
Aggregate for secondary metallurgy, mineralogical raw material

MgO	CaO	Fe_2O_3	Al_2O_3	SiO_2
82.0 %	1.5 %	0.7 %	8.0 %	0.5 %

MgO 75

Raw material base
Magnesia and magnesia-carbon bricks

Application examples
Slag forming agents, slag conditioners, covering agents

MgO	CaO	Fe_2O_3	Al_2O_3	SiO_2	C
75.0 %	6.0 %	5.0 %	5.0 %	5.0 %	5.0 %

MgO 82 A7F6

Raw material base
Magnesia

Application examples
Aggregate for secondary metallurgy, mineralogical raw material

MgO	CaO	Fe_2O_3	Al_2O_3	SiO_2
82.0 %	2.0 %	5.5 %	6.5 %	1.3 %

All values given are for orientation.

Non-basic raw materials

TE 80

Raw material base
High-alumina,
bauxitic secondary raw materials

Application examples
Slag fluxing agents, slag forming agents in secondary metallurgy

Al_2O_3	CaO	Fe_2O_3	MgO	SiO_2	TiO_2	C
78.0 %	2.0 %	2.5 %	3.0 %	11.0 %	2.0 %	2.0 %

TE 90

Raw material base
High-alumina secondary raw materials

Application examples
Slag fluxing agents, slag forming agents in secondary metallurgy

Al_2O_3	CaO	Fe_2O_3	MgO	SiO_2	TiO_2
90.0 %	2.5 %	0.8 %	2.5 %	1.8 %	0.1 %

TE 85

Raw material base
High-alumina secondary raw materials

Application examples
Slag fluxing agents, slag forming agents in secondary metallurgy

Al_2O_3	Fe_2O_3	MgO	SiO_2	TiO_2	C
85.0 %	0.7 %	2.5 %	7.5 %	0.4 %	6.0 %

TE 60

Raw material base
Alumina

Application examples
Slag forming agent

Al_2O_3	CaO	Fe_2O_3	MgO	SiO_2
60.0 %	2.0 %	2.0 %	5.0 %	28.0 %

All values given are for orientation.

Other raw materials

Rhecal A55M34S4

Raw material base
Alumina-magnesia

Application examples
Slag forming agent

MgO	Fe_2O_3	Al_2O_3	SiO_2	TiO_2	Cr_2O_3	SO_3	C
35.0 %	2.0 %	56.0 %	4.0 %	0.6 %	0.5 %	0.06 %	6.0 %

Rhecal A68M20S4

Raw material base
Assorted carbon-bonded bricks

Application examples
Slag forming agent

MgO	Fe_2O_3	Al_2O_3	SiO_2	TiO_2	CaO	C
20.0 %	4.0 %	68.0 %	4.0 %	2.0 %	2.0 %	6.0 %

Rhecal 10

Raw material base
Clay-dolomite-fluorspar mixture

Application examples
Slag forming agents, desulphurization agents

MgO	CaO	CaF_2	Fe_2O_3	Al_2O_3	SiO_2
6.0 %	15.0 %	10.0 %	2.0 %	55.0 %	9.0 %

All values given are for orientation.

CFA 40-60

Raw material base
Pre-molten slag

Application examples
Slag forming agent,
refractory raw material

Al_2O_3	CaO	CaF_2	Fe_2O_3	MgO	TiO_2	SiO_2
20.0 %	20.0 %	50.0 %	0.6 %	2.5 %	0.5 %	5.0 %

Rhecal A27

Raw material base
Calciumaluminate

Application examples
Raw material

Al_2O_3	CaO	Fe_2O_3	MgO	SiO_2
27.0 %	50.0 %	7.0 %	7.0 %	5.0 %

Rhecal A75

Raw material base
Calcium-aluminate slags

Application examples
Slag fluxing agents

Al_2O_3	CaO	Fe_2O_3	MgO	SiO_2	Cr_2O_3
75.0 %	19.0 %	0.3 %	1.0 %	1.5 %	2.5 %

All values given are for orientation.

Customer Benefits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