

Ferrum – for the iron and steel industry





Expect a little more

Modern iron and steel production requires lime of a high and uniform quality for optimum results. And we are also required as a partner to deliver on time, to have contingencies in place should anything unforeseen occur, and to always keep abreast of the latest developments.

This is something we do well. We are experts in this field.

SMA Mineral has been extracting and processing limestone since 1980 and has more than 30 years of experience in working with the iron and steel industry. We have production units in five countries and guarantee delivery on time.

But we also feel that you should expect a little more. As a supplier, we want to develop together with you as a customer, which we do through ongoing contact and quality meetings to ensure that we are meeting your requirements. A partnership with us is a partnership with knowledgeable and enthusiastic employees who all work according to our shared values – expertise, reliability, flexibility and innovation.

Welcome!



The right product, at the right time, in the right place

Many large, complex manufacturing processes are dependent on the right lime products being available at exactly the right moment. With a broad range and several internal and external loading sites, we make sure that you as a customer get what you need. At exactly the right time.



Delivery reliability

Thanks to our numerous production facilities we can ensure that deliveries are always made according to plan. Our lime works in Boda, Luleå, Mo i Rana, Oxelösund, Rättvik and Röyttä produce high-quality quicklime for various processes. Slaked lime is produced in Rättvik and Röyttä, while manufacturing of calcined dolomite takes place at Mo i Rana and Rättvik.

Own haulage operations

We have complete control of transportation, partly because we have our own vehicles and partly because of agreements with haulage contractors. We are thus able to guarantee on time and reliable deliveries. As a customer, you can always reach our transportation team, who are available around the clock every day of the year.

Silo monitoring

By monitoring customers' silos we can see when it's time to top them up with lime. We thereby take full responsibility for ensuring availability – a secure and efficient arrangement for you as a customer.

Contingency planning

In order to guarantee deliveries on time, we have stable contingencies in place at SMA Mineral. If a production stoppage occurs, we generally have capacity to deliver from one of our other lime works. Sometimes a production problem at a customer's premises may require a temporary switch to a different form of delivery; for example, delivering products in big-bags if the infeed system on a silo stops working.

The right quality

In order to guarantee the right quality, we ensure the following:

1. Uniform quality with the right chemical composition

Before blasting and quarrying we carry out extensive drilling and take samples of the limestone to determine its chemical composition. We then mix to achieve the right composition for delivery.

2. Optimal calcination

Depending on the application, the carbon content in the lime is a very important factor. Production of stainless steel requires lime with a low residual carbon content, while a slightly higher carbon content can be used when producing carbon steel. The customers' needs determine whether we burn the lime in our rotary kilns or shaft furnaces.

3. Correct reactivity

Different types of lime react at different rates when combined with water. By continually checking the reactivity we ensure that it matches the customer's requirement specification.

4. Degree of attrition for correct particle size

In order to guarantee the particle size, the degree of attrition is an essential parameter. This is therefore measured on a regular basis. Lime burned in a rotary kiln normally yields higher strength to attrition, which means that it lasts better through to the process stage.

5. Weekly analyses summary

In order to ensure the properties of the material over time, we offer a summary of analysis data in the form of weekly or quarterly reports. By analysing the samples using x-rays we can obtain additional information about the chemical composition of the products.

“Our customers must always have peace of mind. That's why we're available around the clock, every day, all year round.”

Thomas Brunzell
Transport Manager
SMA Mineral



Our products

The Ferrum family

Specialist customers and processes demand specialist suppliers and products. The Ferrum family brings together our lime products for the entire steel production process, for both stainless steel and carbon steel. Whatever the application, we can produce the right product with the right chemical composition. And the raw material – well, that's chosen on the basis of the properties required by the product and with the greatest possible consideration for the environment.

Ferrum S

Quicklime for a variety of needs. Used primarily in electric arc furnaces. Can be screened and supplied in a variety of fractions right through from fine-ground to coarse lump lime.

Ferrum DS

Calcined dolomite with a chemical composition and properties suitable for most customers. Can be produced in fractions from 0-60 millimetres.

Ferrum R

A quicklime product with a higher strength and lower carbon content than Ferrum S. Usually produced in smaller fractions of up to 40 millimetres and often used in the converter in the steel production process.

Ferrum DR

Calcined dolomite with extra calcination and higher strength. Normally supplied in fractions of up to 40 millimetres.

Ferrum R+

A specially developed quicklime product for applications with extra requirements for low carbon content and/or sulphur. Extra high strength and minimum fines content.

Ferrum C

Limestone product. Can be supplied with different types of chemical composition, strength and fractions according to needs. Both own deposits and from partners.

Ferrum H

Slaked lime produced from Ferrum S, R and R+. Ferrum H has the chemical properties needed for neutralisation processes, among other uses.

Ferrum D

Our light dolomite is supplied from our own deposit. High chemical purity.



A sustainable SMA Mineral – today and tomorrow

It is in our nature to offer products that yield optimum results. It is equally essential that our production processes are conducted with the greatest possible consideration for the environment. Both today and tomorrow.

Environmental sustainability is part of everything we do. We constantly endeavour to achieve the optimum level of safety in dealing with chemicals and better utilisation of resources – with regard to energy consumption, transport and efficiency of materials.

Supporting research

We are also actively involved in several collaborations:

- SMA Mineral is a member of the metals research institute Swerim, which conducts research within the steel and mining industries in the Nordic region. Through our collaboration with Swerim we are helping to drive environmental improve-

ments and product development within the steel industry. Specifically ensure we manufacture products with less impact on the environment.

- SMA Mineral is involved in financing a new centre at the Department of Applied Physics and Electronics at Umeå University, to strengthen research in the field of sustainable cement and lime production.

Positive for the environment

Our products also have a positive effect on the environment: We supply lime to applications in purification of flue gases and drinking water, neutralising acidified watercourses, sanitising contaminated soil and improving farm soil quality.

Our history

Our history began in a mining area that dates back to the 14th century – at Gåsgruvan quarry outside Filipstad in Värmland. The Juvél family acquired the lime works from Uddeholm in 1980, and that was the start of what is now SMA Mineral.

Today we have production facilities in Sweden, Norway, Finland, Estonia and Bulgaria and are a leading supplier of high-quality lime products to a variety of industry segments.

Want to know more? www.smamineral.se

Our production sites for our lime:

SWEDEN

Berga
Boda
Eneby
Falkenberg
Gåsgruvan
Jutjärn
Klinte
Kullsberg
Luleå
Oxelösund
Rättvik
Sandarne
Stucks

NORWAY

Mo i Rana
Seljeli

BULGARIA

Dimitrovgrad
Malko Tarnovo
Shumen

FINLAND

Kalkkimaa
Loukolampi
Ristimaa
Röyttä

ESTONIA

Võhmuta

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