



**OUR WORLD
IS MADE OF
STEEL**

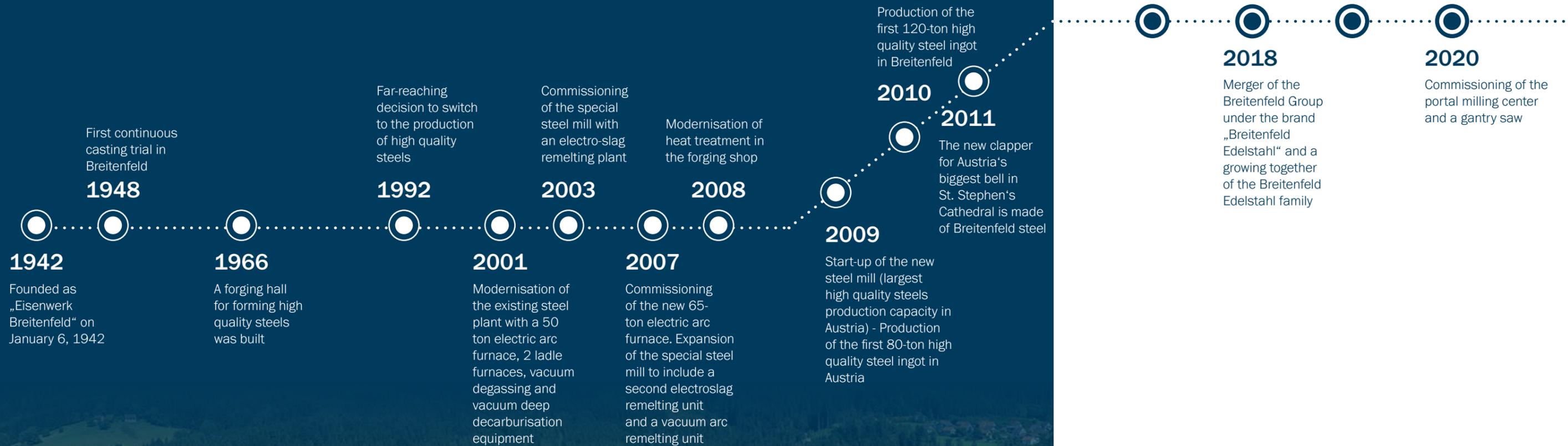
Breitenfeld
Edelstahl





ABOUT BREITENFELD HISTORY

Successful for over 75 years



We offer a flexible range of products from cast ingots (conventional, ESR, VAR) to forged semi-finished products and steel bars.

„Breitenfeld products can be found almost everywhere in modern life.“

Our products are used in the following areas::

- ▶ Conventional and renewable power generation
- ▶ Petrochemistry (oil and gas)
- ▶ Tool manufacturing
- ▶ Mechanical engineering
- ▶ Transportation/Racing
- ▶ Aviation and aerospace
- ▶ Shipbuilding
- ▶ High-pressure technology



BREITENFELD EDELSTAHL AG...

BREITENFELD EDELSTAHL
**THE STRONG AND
INDEPENDENT
PARTNER
FOR THE FUTURE**

is a flexible and reliable partner

delivers high quality goods

guarantees customer satisfaction through many years of experience and expertise

reacts quickly to customer requests

is aiming long-term customer cooperations

encourages the quality, performance and creativity of its employees

acts responsibly regarding society and the environment

is communicating openly and transparently

INFRASTRUCTURE STEEL PLANT



ELECTRIC ARC FURNACE

Heart of the steel mill:
a modern 65 ton electric arc furnace
with changeable vessel



LADLE FURNACE

For heating up the steel melt before
vacuum treatment and for
homogenising the melt



VACUUM DEGASSING

By reducing dissolved gases
such as hydrogen and nitrogen
the steel purity is improved



VOD PROCESS

To produce high-chromium
steels with lowest
carbon contents



INGOT CASTING

The finished steel is poured into permanent
moulds (square, rectangular, round or
polygonal cross section).



HEAT TREATMENT

30 cooling hoods and
12 annealing furnaces
for cast ingots



INFRASTRUCTURE FORGE PLANT



10 MN HYDRAULIC PRESS

Main hot forming unit of Breitenfeld



32 KN FORGING HAMMER

Hot forming unit for the final shape and best surface quality



FREE-FORM FORGING HAMMERS

Three additional forging hammers for manufacturing forged rings and discs as specified by the customer



BOGIE HEARTH FURNACES ACCORDING TO AMS 2750 F

Two heat treatment furnaces for aircraft applications – this is where the forged products get their specific properties



BOGIE HEARTH FURNACES ACCORDING TO DIN EN 65570

Nine heat treatment furnaces – a wide range of state-of-the-art heat treatments can be carried out



WATER & POLYMER TANK

When required, the forged products are quenched from the austenitizing temperature



INFRASTRUCTURE SPECIAL STEEL PLANT

With the electroslag and vacuum arc remelting we achieve a high purity, lowest amounts of unwanted trace elements and an excellent ingot structure in Breitenfeld products.

Depending on the process, remelted ingots can be produced from 420 mm to 1,200 mm in diameter and weights up to 35 tons.



ESR TECHNOLOGY

In 1,700 to 2,000 °C hot slag, metal droplets melt off a consumable electrode under protective gas atmosphere and solidify almost simultaneously in a water-cooled mould.



VAR TECHNOLOGY

Using the direct current principle permanent arcs are ignited under vacuum between the electrode and the melting sump. The dissolved metal droplets solidify again in a water-cooled copper mould.



PROCESSING



GRINDING

We process on our grinding machines ingots up to weights of 65 tons.



SAWING

Several band saws up to a diameter of 1,500 mm and a maximum weight up to 65 tons.



PEELING

Round bars with a length between 3,000 and 8,000 mm can be peeled to a diameter between 75 and 350 mm.



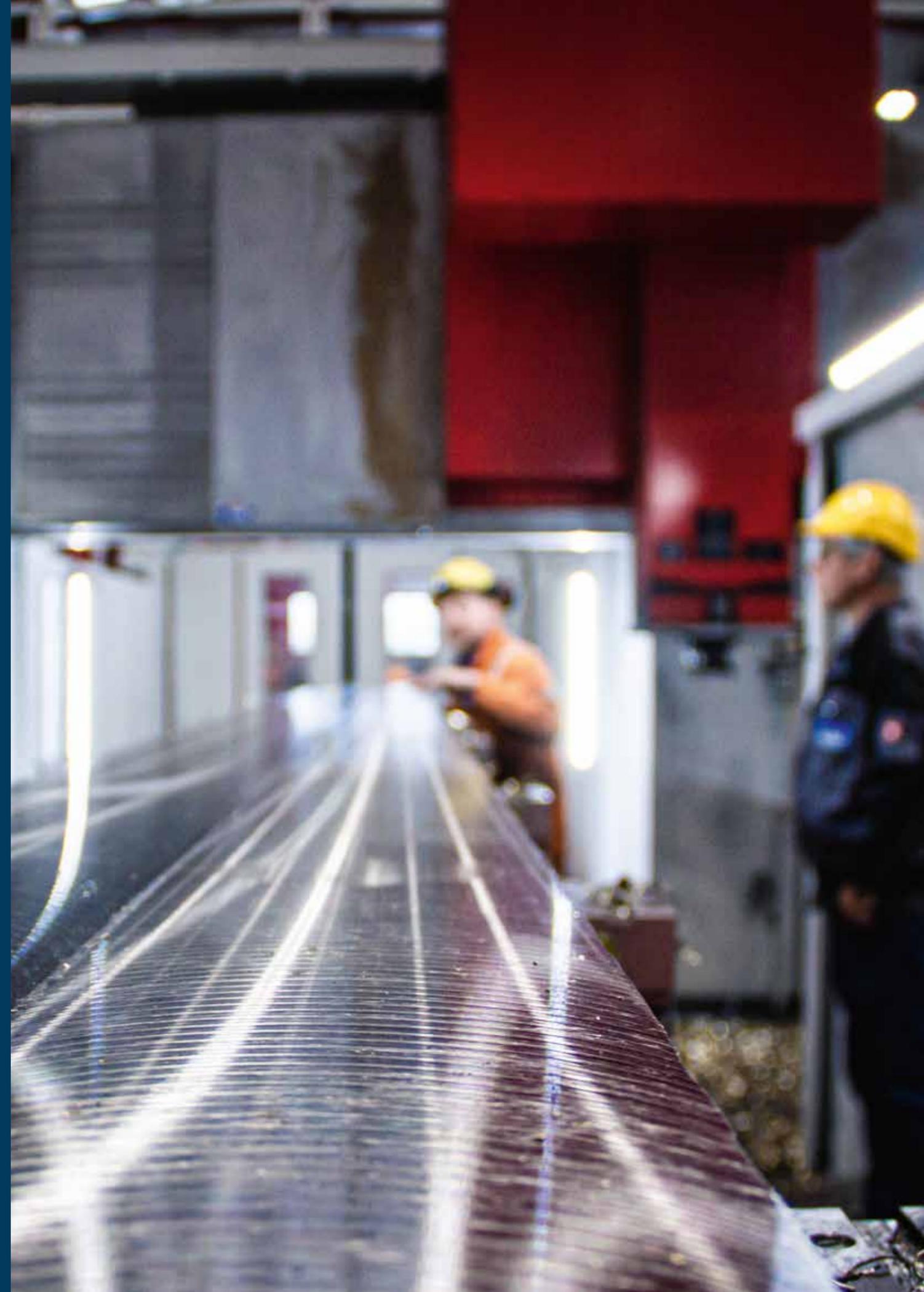
MILLING

Flat and square steel bars up to the maximum dimensions of 2,000 x 1,250 x 14,000 mm can be milled.



TURNING

Round bars up to a maximum of \varnothing 500 x 9,000 mm or \varnothing 650 x 6,000 mm can be turned.





GREEN STEEL

We are a recycling company

Reusing scrap without consuming refined ore and coal/coke makes the production of stainless steel one of the oldest recycling technologies. 90% scrap and 10% alloying elements are used to produce steel. In addition, there are consumable materials like refractory, electrodes, electricity and gas. The scrap used as feed material is 100% recyclable.

Breitenfeld therefore contributes significantly to the recycling economy and resource efficiency.

They say the future is electric – we already are right now. There are several ways to produce steel. At Breitenfeld, only the electric steelmaking process is used (melting with electric arc furnace). Compared to blast furnaces, the production with the electric arc furnace is more flexible, specialized and eco-friendly.

The electric arc furnace can be powered up and down depending on the use.

CO2 emissions from crude steel production in the electric arc furnace are 90% lower than in integrated metallurgical plants that operate blast furnaces.

The average emissions of the EU steel industry per ton of produced steel are almost 2.0 t CO2 – taking into account direct emissions (Scope 1). Scope 1 across all production plants of Breitenfeld Edelstahl AG is 0.215 t CO2/t steel – so, around 1/10 of the European average.

CO2 emissions can be further reduced by using green electricity. We are already working on projects to use green electricity.

The basis for steel production at Breitenfeld is scrap. The scrap collection system that is available in Austria is used to collect steel products that are no longer usable. There, we make sure that travel distances are as short as possible. So, even in this early phase we are able to avoid CO2 emissions by choosing short transport routes, 75% of which are carried out by rail.

Our products are made of 90% scrap and leave a small ecological footprint as they can be 100% recycled, and therefore contribute to the conservation of resources and to environmental relief.

Raw material management is key for Green Steel, in terms of obtaining scrap, scrap cleanliness and division, as well as exact calculation of usage.

Scrap is also fed back directly into Breitenfeld's scrap cycle by customers.

High-quality stainless steel significantly extends product durability and enables a higher energy efficiency of machines, engines and other end products. At the end of a product's life, the next step is recycling the scrap, and thus the start in the stainless steel production cycle.



ENVIRONMENT

Responsibility for an intact environment

Recycling

Due to the high intensity of material and energy, a sustainable management plays a key role for us. We have always been recycling scrap and making steel out of it. Scrap iron is the most recycled raw material in the world and helps save more than one billion tons of primary raw materials each year. Each steel mill thus serves as a recycling plant.

Conservation of resources

In terms of resource conservation, the almost closed water cycle in the steel production is of great importance. To prevent lime precipitation in the heat exchanger and on the cooling tower, chemistry that is binding water hardness is usually used. Breitenfeld is the only steel factory in Austria that purifies recooling water not with chemistry but by pH-controlled CO2 injection. This means that there is no environmental pollution by harmful and persistent chemical substances.

Legal requirements

An intact environment is absolutely essential. We are aware of our responsibility and act accordingly to protect the environment in terms of air, water and soil quality. Of course, we comply with the strict legal requirements, but we keep working on becoming even better.



WORKPLACE SAFETY

Safety first.

Our highest priority is providing a safe, healthy and accident-free work environment. The experts from our „Occupational Safety and Health Protection“ team support us in that. When it comes to workplaces, work processes and the working environment, they take preventive measures and systematically develop diverse methods to achieve ideal workplace quality.

It is our goal to prevent unsafe situations from happening in the first place, so that at the end of the working day everyone can return home safely.

Our occupational safety measures:

Regarding health and safety, workplaces are inspected and evaluated in order to minimise the physical and mental stress, as well as the risk of accidents.

Our high safety standards are regularly checked through inspections of safety officers, occupational physicians, the management board, operation managers and safety representatives in all areas of the facility.

Organisation of safety events with different topics focusing on hazards, prevention and assistance.

Ongoing training of managers and the „Occupational Safety and Health Protection“ team.

All our employees strengthen and develop competencies in accident prevention through trainings and workshops.

Agreements within the company on workplace safety.



LOCATION

St. Barbara

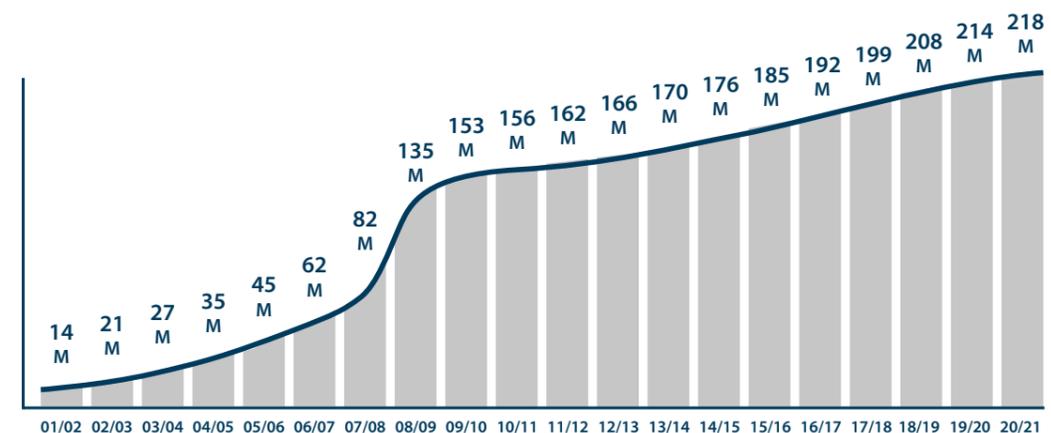
In the heart of Austria

Breitenfeld Edelstahl AG is a medium-sized company founded in 1942 and located in St. Barbara in Mitterdorf/Styria with a steel mill, special steel mill and forging plant. We are a recognized manufacturer of

high quality steels and forged products. Our core competence is a high level of metallurgical expertise combined with state-of-the-art production technologies. We serve a very attractive end-customer market, such as the power generation market,

oil & gas industry, aerospace, transportation and engineering industries.

We focus on high quality steels, a high-value niche segment in the world of steel.



M = million



QUALITY ASSURANCE

Your partner for safety, trust and development.

Trust and safety

High internal quality standards ensure high-quality products and lead to safety and reliability within our company. Our quality standard is taken into consideration in all processes and levels and is lived by our employees. Monitoring and analytical evaluation of the product quality are carried out by qualified personnel and modern technology. Our customers can expect consistent transparency in quality checks, which increases our efforts to demonstrate trust and safety even more.

Consistency

High customer-oriented quality standards and structured analyses of possible improvements already play a key role at a very early stage of development and production. Time, material, costs and resources can thus be saved and used efficiently. Quality assurance starts with incoming goods and goes on till the shipment of the products. Additionally, customers are provided with comprehensive advice and flexible support in case of questions on further processing and utilisation.

Standards and customer specifications

With an increasing number of specifications and standards that affect our products and manufacturing processes today and in the future, there is also a rise in the necessity of quality assurance. A quality management directly integrated into the processes guarantees that a quality consciousness is lived, adhered to and further developed within the company.

OUR QUALITY MANAGEMENT SYSTEM
ASSURES THE COMPLIANCE
WITH THE HIGHEST QUALITY STANDARDS
OF BREITENFELD'S
HIGH QUALITY STEEL PRODUCTS

QUALITY MANAGEMENT

Complying with the highest quality standards

Operational excellence at Breitenfeld Edelstahl AG

With the corporate strategy of Breitenfeld Edelstahl AG comes a modern and process-oriented quality management system. We aim to constantly improve our processes and products to keep increasing customer satisfaction permanently. And for that we are continuously developing the quality management, strengthening the quality culture, and we are ensuring a comprehensive development and encouragement of our employees. In order to meet our customers' requirements, we implement modern management systems and thus achieve operational excellence.

We aim to obtain and increase the satisfaction of our customers and all our business partners daily, and we comply with a large number of international certifications. You can find our current certificates here: <https://www.breitenfeld.at/zertifikate>





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THE



Get in contact
with our team!

Breitenfeld 
Edelstahl

Breitenfeld Edelstahl AG
Breitenfeldstraße 22
8662 St. Barbara-Mitterdorf
Austria
t +43 3858 6161 0
info@breitenfeld.at

www.breitenfeld.at