



OUR WORLD IS MADE OF **GREEN STEEL**

***“Breitenfeld Edelstahl AG is a specialized supplier
of high-quality steels and forged products.”***

Austrian high quality
steel manufacturer
(Steel mill, forging shop,
special steel plant)

Private company
330 employees (AT, IT & GER)
€ 243 million turnover
in FY 2022/23

200.000 to 250.000 MT
annual capacity in the
steel mill (depending
on the product mix)



The plant site covers a total of 250,687 m²



Management-buy-out
from the Pengg Group

Commissioning of the new steel mill
(largest special steel production
capacity in Austria)



Foundation of
“Eisenwerk Breitenfeld”

Construction of special steel plant and
commissioning of the 1st ESU plant

Commissioning of the 3rd ESU system

1942

1948

1966

1997-
2000

2001

2003

2007

2009

2017

2019

2020

2022

2024

The world's first
continuous casting

Change of strategy to the special steel
segment and modernisation of the steel mill

Construction of a new forging hall and
commissioning of the peeling machine

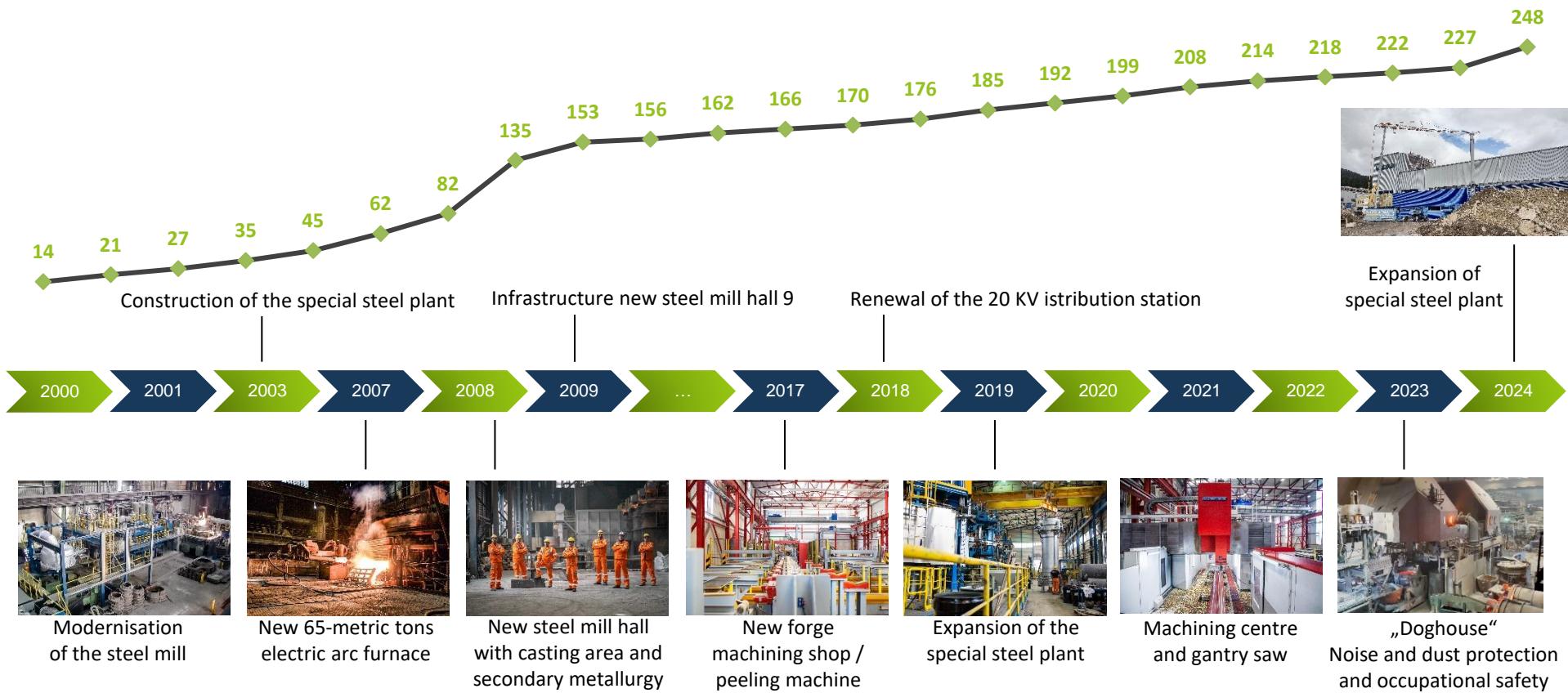
Hall extension
special steel plant
and 2nd VAR system

Start up of the
forging shop

Commissioning of the 2nd ESU system, of the 1st VAR
system and the 65-metric tons electric arc furnace

Commissioning of a machining centre
and installation of a gantry saw

CAPITAL EXPENDITURE IN € MILLION



"Breitenfeld products can be found almost everywhere in modern life."



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

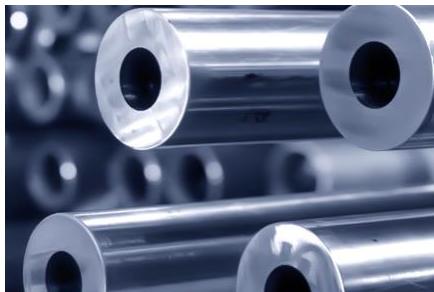
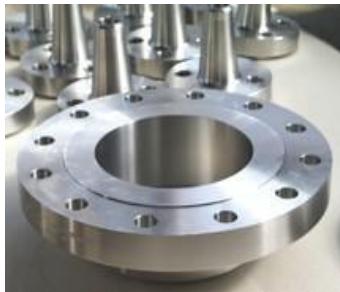
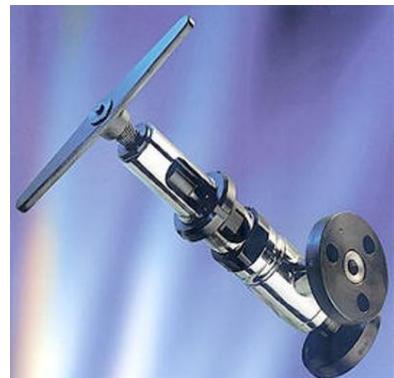


PRODUCTS OIL & GAS INDUSTRY

Breitenfeld
Edelstahl 



- Flanges
- Rings
- Bends
- Tubes
- Discs
- Screws
- Bars
- Valves



RACING PRODUCTS

Breitenfeld
Edelstahl 

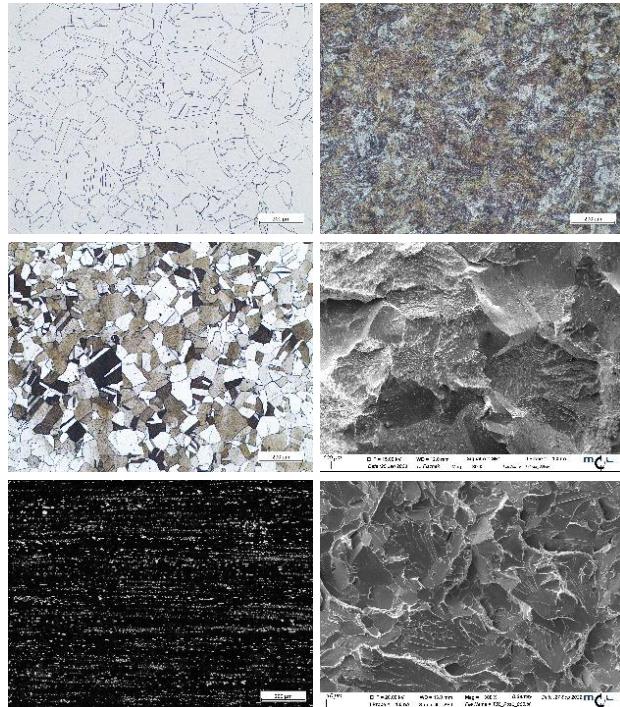


- Semi-finished products mainly for drop forging
- Bar steel
- (Injection) pump systems
- Cam shafts
- Connecting rods
- Bolts
- Gears
- Crankshafts
- Gear parts



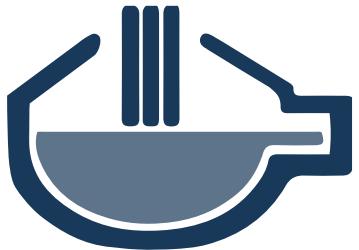
We produce high quality steel according to all international standards

- Specialty steels according to customer requirements
- Tempered steels
- Case-hardening steels
- Tool steels
- Stainless steels (austenitic, martensitic, ferritic)
- Duplex , Superduplex
- Ni-base alloys



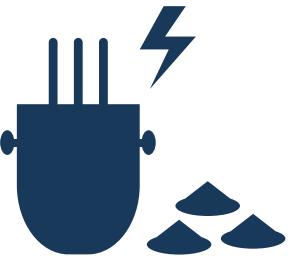
PRODUCTION





ELECTRIC ARC FURNACE

Heart of the steel mill - a modern 65-metric tons electric arc furnace with changeable vessel



4 LADLE FURNACES

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



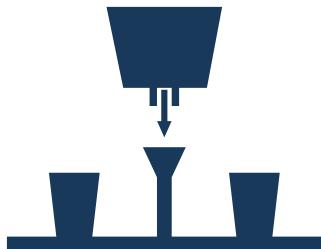
2 VACUUM DEGASSING SYSTEMS

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



2 VOD SYSTEMS

To produce high-chromium steels with lowest carbon contents



INGOT CASTING

Pouring the molten steel into moulds by means of 3 casting trolleys or crane casting



HEAT TREATMENT

30 cooling hoods and 12 annealing furnaces for cast ingots

- With the electroslag and vacuum arc remelting we achieve a high purity, lowest amounts of unwanted trace elements and an excellent solidification structure in our products.
- Depending on the process, remelted ingots can be produced from 420 mm to 1,200 mm in diameter and weights up to 35 metric tons.
- The special steel plant has 2 heat treatment furnaces (50 and 30 metric tons respectively) for the remelted material.



ESR-TECHNOLOGY
(3 SYSTEMS)

In 1,700° C 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
(2 SYSTEMS)

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



SAWING

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



GRINDING

We grind on our ingot grinding machines up to an ingot weight of 65 metric tons.

More than 60 different types of conventional ingots

- square, octagonal, polygonal, round, flat
from 1,000 kg up to 121,000 kg



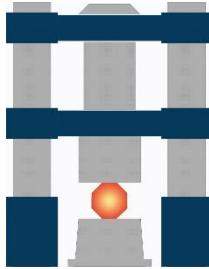
6 different types of ESR ingots

- round from 960 kg up to 28,000 kg



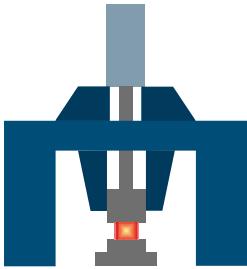
4 different types of VAR ingots

- round from 2,600 kg up to 18,500 kg



10 MN HYDRAULIC PRESS

Main hot forming unit of Breitenfeld
this is where the produced ingots are shaped



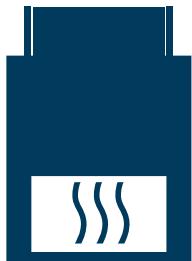
32 KN HAMMER

Hot forming unit for the final shape
and best surface quality



FREE-FORM FORGING HAMMER

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



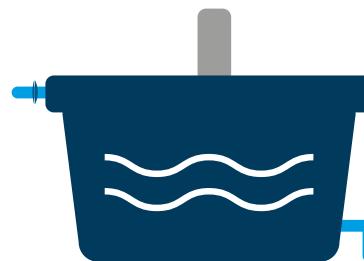
BOGIE HEARTH FURNACES ACCORDING TO AMS 2750 F

Two heat treatment furnaces
for aerospace applications



BOGIE HEARTH FURNACES ACCORDING TO DIN EN 65570

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



WATER & POLYMER POOLS

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



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 Ø 500 x 9,000 mm or Ø 650 x 6,000 mm can be turned.



SAWING

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

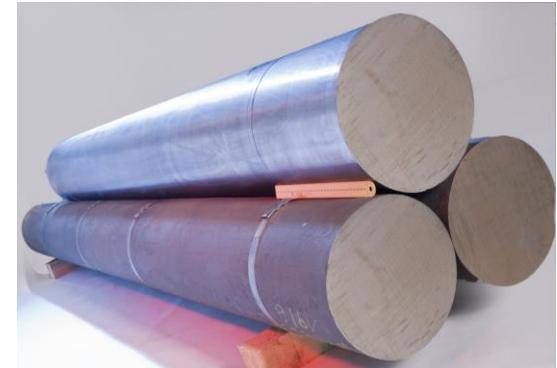


GRINDING

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

- **Bars**

round, square, flat
sizes from 95 – 1,000 mm



- **Scheiben**

diameter: max. 750 mm
height: max. 450 mm
weight: max. 1,000 kg



- **Rings**

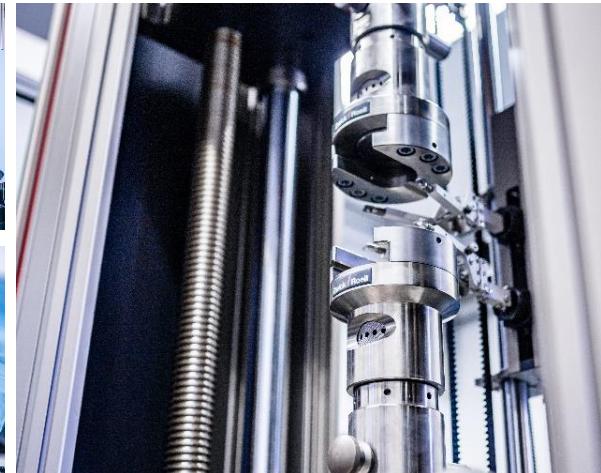
diameter: max. 1,000 mm
height: max. 450 mm
weight: max. 1,300 kg



- **Open die forgings**

We fulfil highest customer's requirements based on:

- Our plant-wide quality management system
(including planning, production and control steps)
- Qualified staff
- State-of-the-art equipment



Management system certifications:

EN 9100 & ISO 9001 - Quality management systems

Requirements for aviation, aerospace and defense organizations



ISO 14001 – Environmental management system

Requirements with instructions for use



Aerospace and defense

- EN 9100

Pressure equipment

- PED 2014/68/EU
- AD-WO/TRD 100
- PED 2016 – UKCA

Nuclear power applications

- KTA 3201.1 section 2.4
- KTA 3401.1
- KTA 1401
- AVS D 100/50
- IAEA 50-C-Q und GS-R-3



Oil & Gas

- NORSO M-650, MDS D47
- ISO 17782

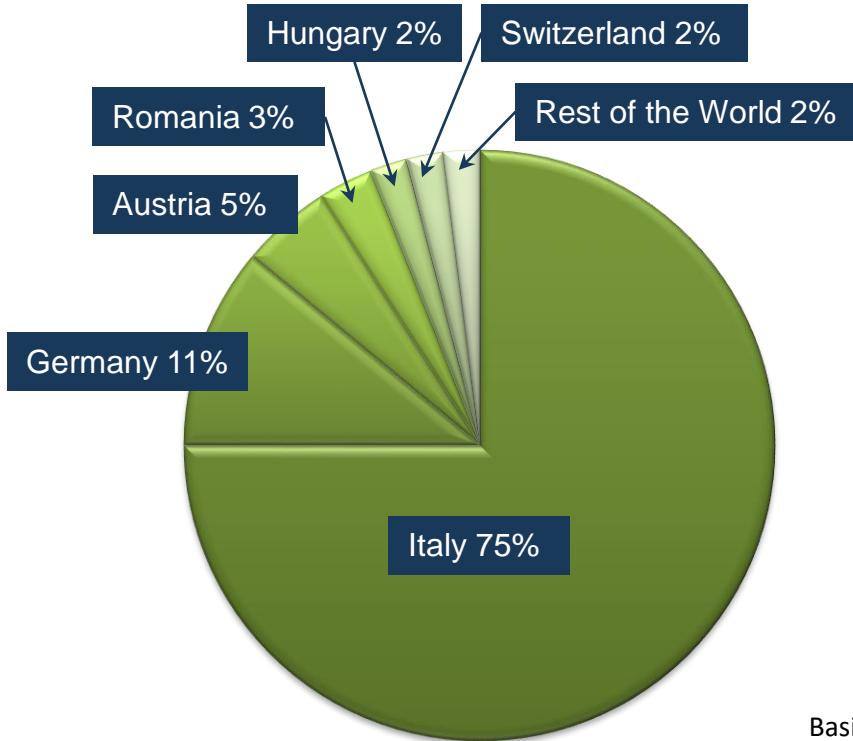
Marine applications

- Lloyd's Register
- DNV
- Bureau Veritas
- American Bureau of Shipping
- Class NK
- Class KR

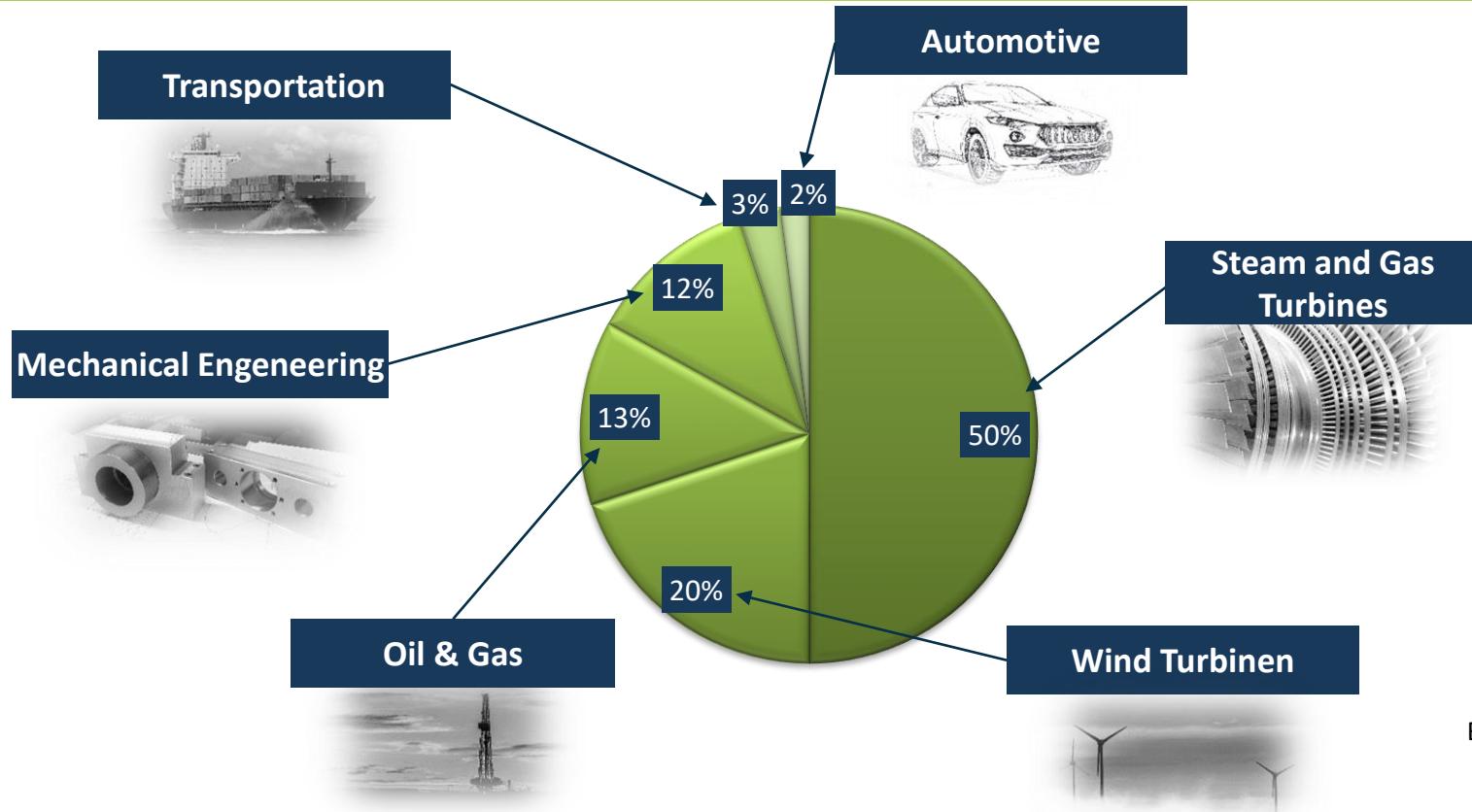


Other approvals

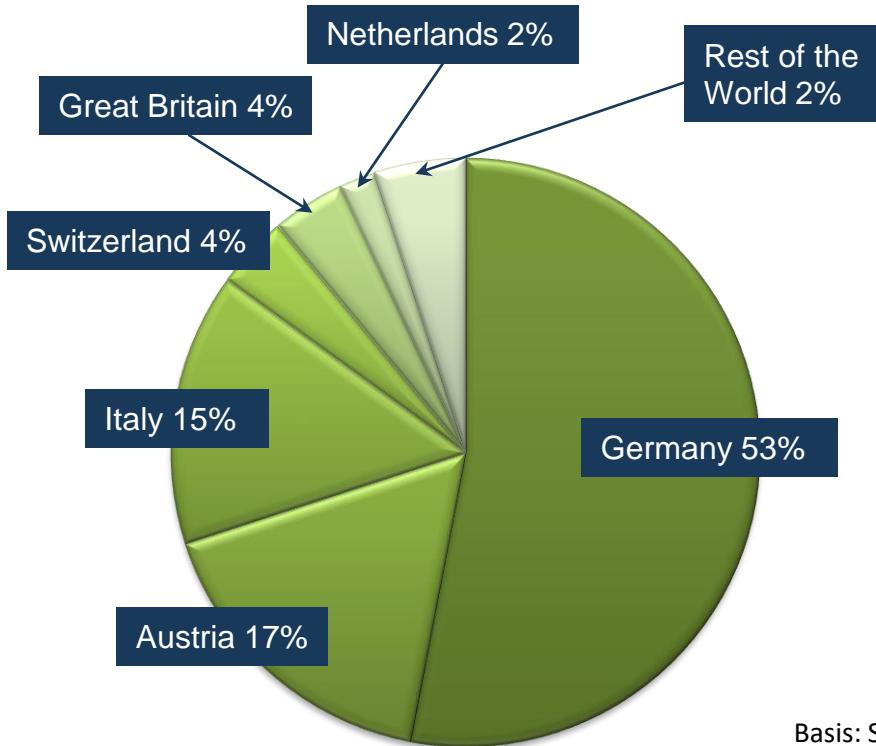
- REACH RoHS CMRT EURATOM



Basis: Sales BY 2022/23

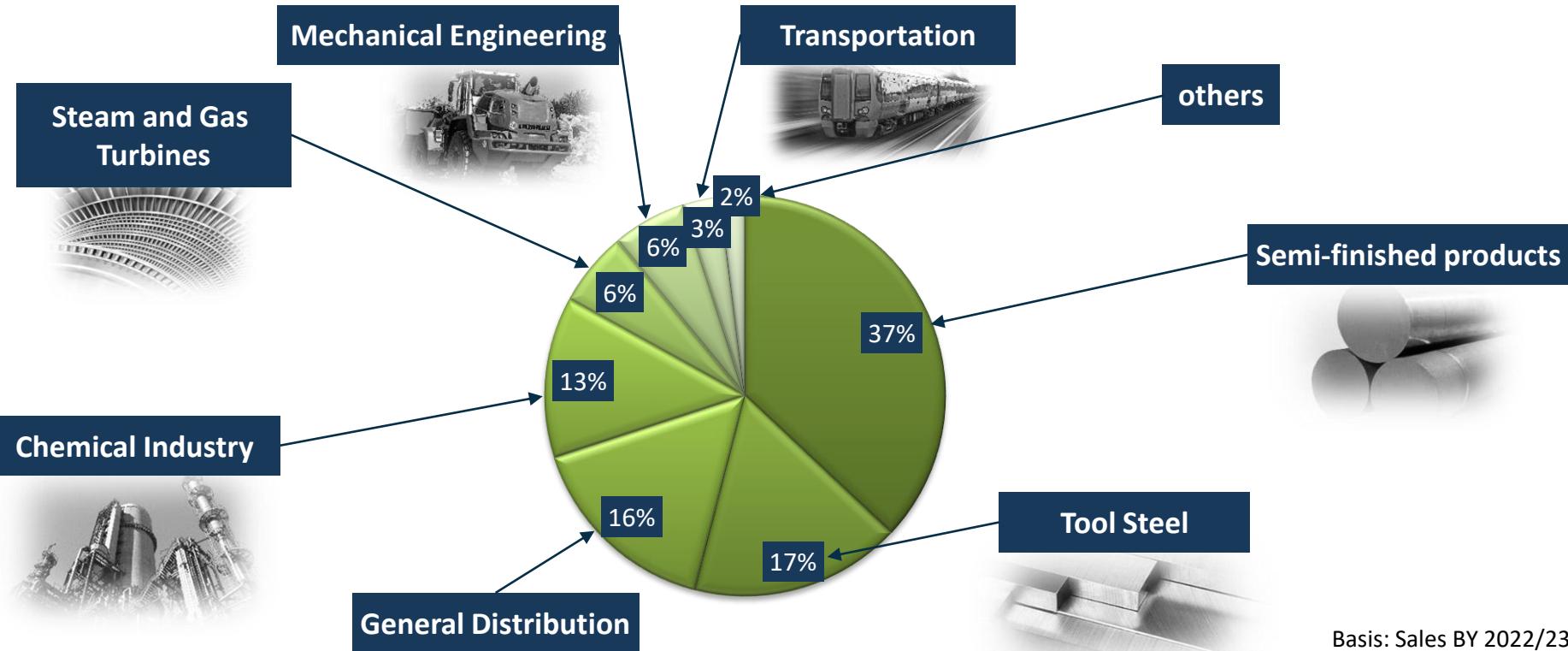


Basis: Sales BY 2022/23



Basis: Sales BY 2022/23

MARKET SEGMENTS FORGING SHOP



REFERENCES

Breitenfeld
Edelstahl 




**FOMAS
GROUP**


Dirostahl


**forge
monchieri**


KCMF

HAMMERWERK ERFT


Walzwerke Einsal
we shape it


**SIDERFORGEROSSI
GROUP**


SIEMENS


ff
friulforgia srl


FORGE FEDRIGA


FORGIATURA MORANDINI


**ILSENBURGER
GROBBLECH**
Ein Unternehmen der Salzgitter Gruppe


**PANKL
RACING SYSTEMS**


STO OSS
FORGEMASTER
STEEL AT ITS BEST


Uhde 
ThyssenKrupp


voestalpine
ONE STEP AHEAD.


ofar
steel Forging

GIVIA GROUP

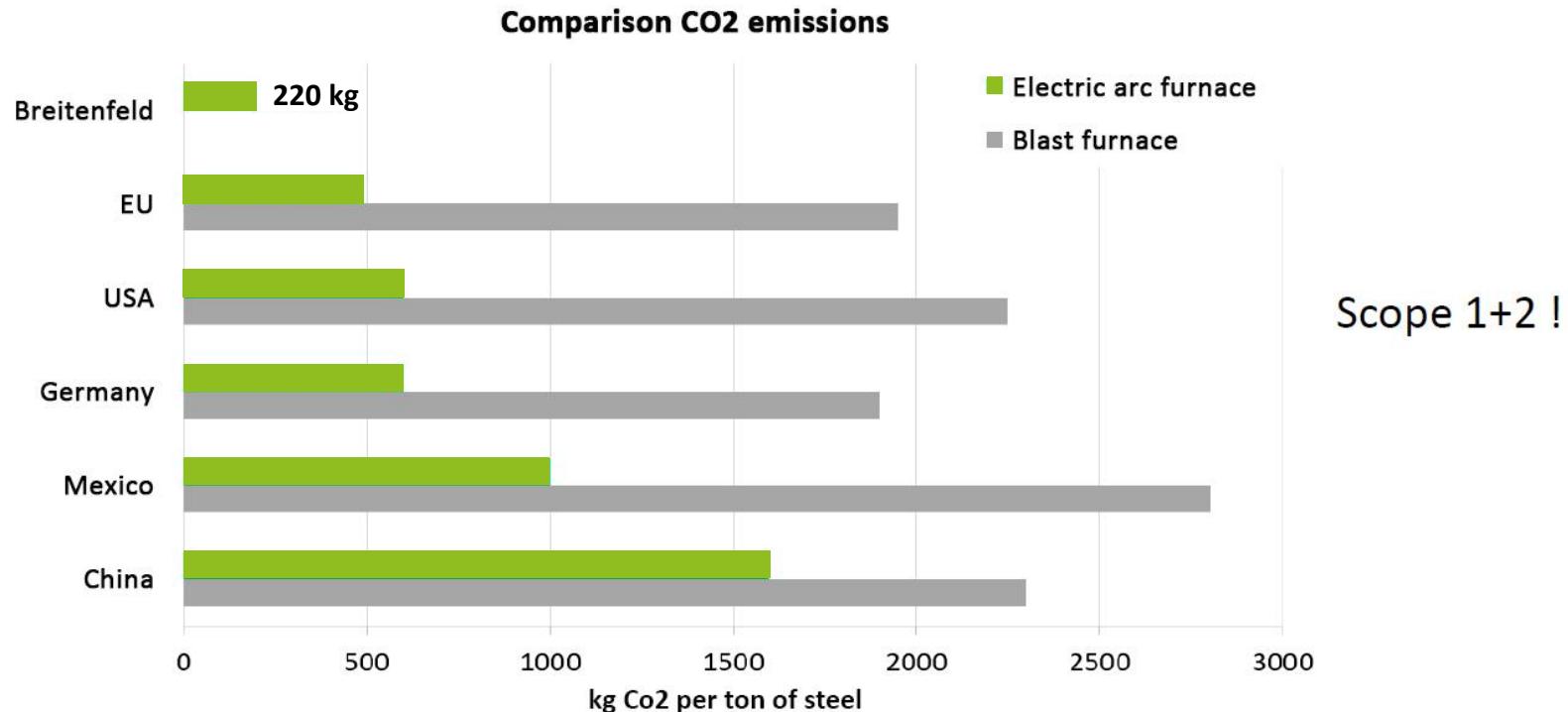

BHDT


FRANCHINI ACCIAI®
1968 | 2018
#STEEL WORKERS GENERATION

Stainless steel production for our future:

- Breitenfeld Edelstahl AG has been focussing on the emission-reduced electric steel process for over 80 years.
The future of steel production is electric – we are already doing it.

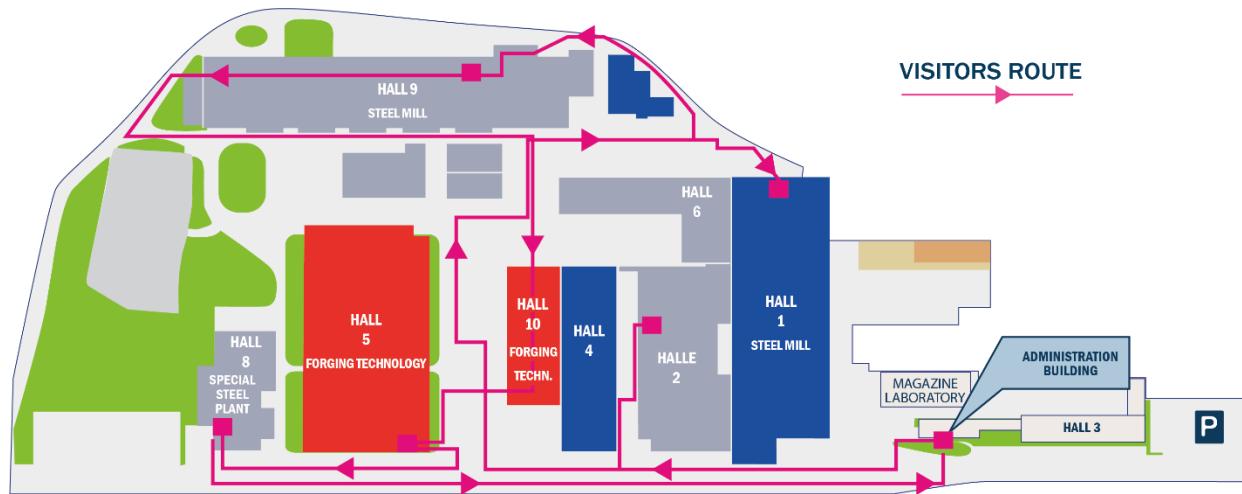
- In Breitenfeld, 90 % scrap and 10 % alloying elements are used to produce steel. The scrap used as input material is 100% recyclable. In this way, we are making a significant contribution to the circular economy and resource efficiency.
The future is recycling – we are already doing it.



Source: Fraunhofer, IMWS (2020), supplemented by Breitenfeld Edelstahl

- Supplying local residents with district heating.
- Use of process heat to support steam generation.
- Use of CO2 to neutralize cooling and process water.
- Using waste heat to dry functional refractory products.
- We will reduce CO2 emissions even further by using renewable energy.





- It is prohibited to take photographs unless allowed so by an authorised person.
- The use of open fire and smoking are prohibited.
Smoking is only allowed in the specifically designated smoking areas
- Respect the environment. Throw your waste in the waste bins and follow the rules on waste recycling.



Andreas Graf (COO/CMO) and Huberta Eder-Karner (CFO)



Gernot Nöst
Overall Sales Manager



Thomas Weghofer
Sales Manager
Steel Products



Emil Hamzic
Sales Manager
Forged Products

WE...

- are a flexible and reliable partner.
- deliver high quality products.
- guarantee customer satisfaction based upon vast experience and metallurgical know how.
- develop the knowledge, performance and creativity of our employees.
- act responsibly in respect to our society and to our environment.

