



Gautschi[®]
EBNER[®] GROUP MEMBER



The most innovative Full Solution Provider for Casthouses since 1922

For over 100 years, the name Gautschi has stood for reliability, innovation, and engineering excellence in the aluminum industry. What began in 1922 as “Caloriewerke Gautschi & Brand” in Singen, Germany, has evolved into an internationally recognized technology leader – headquartered in Ranshofen, Austria, and trusted by customers around the world.

Our Mission

We offer more than just equipment – we deliver tailored complete solutions for modern aluminum casthouses. From melting and casting to heat treatment, we provide all technologies from a single source – perfectly coordinated, efficient, and future-ready.

Our Portfolio

- **Melting and Holding Furnaces**
For processing primary aluminum and scrap – powerful, efficient, and sustainable.
- **Ingot Casting Machines**
For the production of primary and secondary ingots with consistently high quality.
- **Vertical Casting Machines**
For the production of rolling slabs and billets, designed for maximum performance.
- **Heat Treatment Furnaces**
Tailored for coils, rolling slabs, and billets, delivering perfect metallurgical properties.



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Technology meets Experience

Our innovations – such as the round top melting furnace, pusher furnace, compact coil furnace and Airglide® billet mould technology – set new benchmarks in efficiency, quality, and process reliability. Each development is built on deep industry expertise and a clear vision: making our customers' casthouse operations more powerful, more efficient, and more sustainable.

Since 2010, Gautschi has been part of the **EBNER GROUP**, a globally active technology group known for its commitment to excellence and innovation. The integration of HPI in 2017 further expanded our portfolio – today, Gautschi and HPI together form a powerful full-solution provider for casthouses producing both billets and slabs.

Why Gautschi?

- Over 100 years of experience
- Global technology leadership
- Tailored solutions for specific customer needs
- Part of the innovative **EBNER GROUP**

The Future needs a strong basis

We take pride in our heritage – and look to the future with passion. As a trusted partner, we support our customers in building more efficient, environmentally responsible, and economically successful casthouses.



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Our Product Portfolio

Liquid Metal Furnaces

Gautschi has over 100 years of experience in the design of melting and holding furnaces for the aluminum industry.

We are known for the robust construction of our products, modern and innovative technologies and quality service. Furthermore, we are represented throughout the world by more than 500 furnaces, ranging from 10 t to 170 t liquid metal capacity.

Round, Top-Charged Melting Furnaces

Up to 170 t metal capacity – melting rates up to 45 t/h

- Stationary or tilting type
- Cooled furnace cover structure
- Dry cleaning door frame design
- Melting rates up to 45 t/h
- Long service life & high reliability
- High efficiency and low emissions with our new generation of regenerative burners: VAREGA^{ENVICOM®}



Rectangular and Oval Melting and Holding Furnaces

Up to 165 t metal capacity

- Fixed hearth or tilting type
- Single or multiple doors, available over the full furnace width
- High efficiency and low emissions with our new generation of regenerative burners: VAREGA^{ENVICOM®}



Gautschi Burner Systems

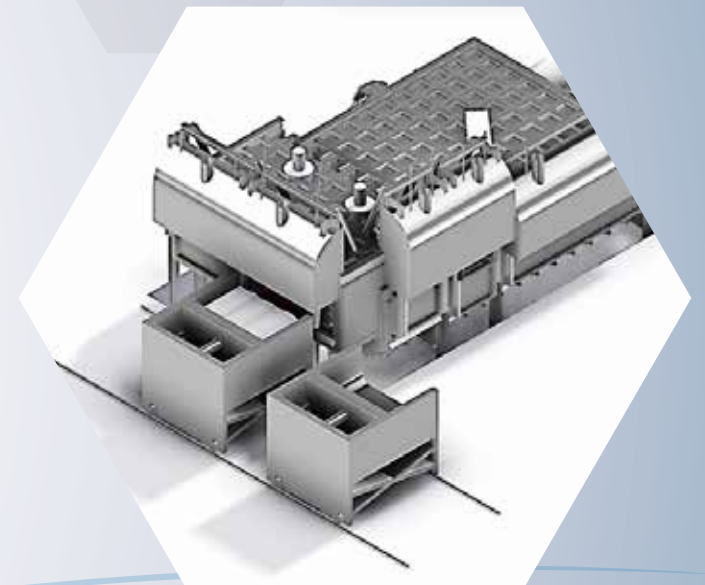
1000 kW to 11 000 kW

- Cold air
- Regenerative VAREGA^{ENVICOM®}
- For NG
- Energy efficient
- Long service life & high reliability
- Fulfill all new environmental requirements, however stringent



Multi-Chamber Furnace

- Bath volumes from 15 t up to 140 t
- Melting capacity: up to 15 t/h, continuous
- EMS stirrer for liquid metal circulation throughout all furnace chambers:
 - Reduced dross
 - Increased output
 - Suitable for both continuous chip and shredded scrap feeding
 - Reduced maintenance and higher availability, compared to a pump
- Extremely low fuel consumption, achieved by using both regenerative burners and the pyrolysis gas generated by preheating the scrap



Hybrid Rotary Tilting Furnace

- Scrap remelting and dross recycling
- Several HTRF installations worldwide, profound process know-how
- Charged Material:
 - Dross
 - Scrap
 - Chips
- Standard sizes from 4 to 25 t capacity (50 t is under development)
 - 1TR2 ■ 4TR12
 - 2TR5 ■ (5TR25)
 - 3TR9



Casting Machines

We are a leading supplier of casting equipment for aluminum. Our casting machines are known for their precise, robust designs and high level of automation. Around the world, the Gautschi family of casting machines is used to produce high-quality rolling slab, extrusion billets, forging stock.

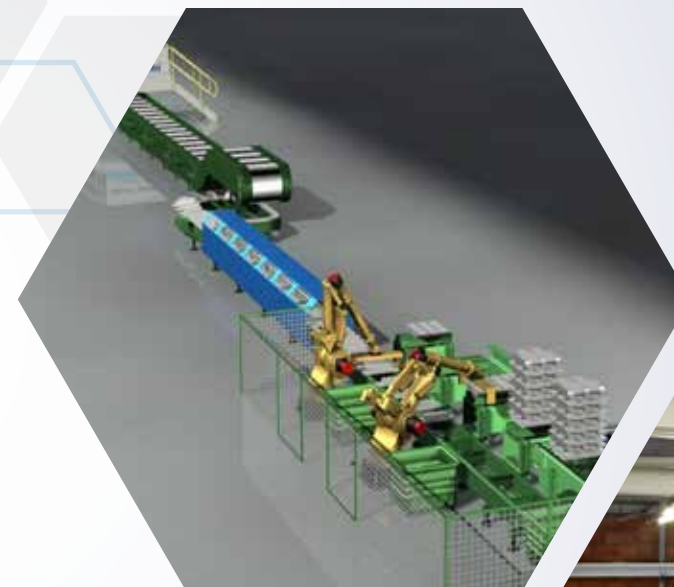
Vertical D.C. Casting Machines for Extrusion Billets and Rolling Slabs

- Internally-guided casting cylinder
- Airslide® mold system for billets
- Gautschi slab mold
- Capacity ranging from 5 to 150 t drop weight
- Tilt frame and drive carriage designs available
- Produces top quality billet and slab for all alloy types, especially 2xxx, 6xxx and 7xxx
- Less cracking with alloy 7150, compared to competitors
- Controlled, low butt curl, no butt swell, very low crack rate



Ingot Casting Machine and Stacking Lines

- For smelter grade and foundry alloys
- Proven casting technology
- Ingot weight 6 to 25 kg
- Up to 22 t/h capacity
- Robotic ingot stacking
- Fully automatic integrated packing line, with weighing, strapping, labelling, marking, colour coding



Heat Treatment Facilities

At Gautschi, we incorporate highly-efficient recuperative burners with minimized heat losses into our heat treatment furnaces – benefitting both the environment and the customer. Modern technologies, state-of-the-art designs, skilled manufacturing and professional installation, as well as competent commissioning, ensure the fulfillment of relevant metallurgical requirements. PLC control systems and industrial computers facilitate the operation of Gautschi heat treatment facilities and make fully-automatic production possible.

Pusher Type Furnaces

References with furnace charges up to 810 t

- Tailor-made handling equipment
- Highly-efficient self-recuperative burners
- Sophisticated nozzle system for excellent temperature uniformity and short heat-up times
- Patented sliding shoe system ensures smooth slab transport
- Low energy consumption
- Powerful cooling system for homogenizing process



Chamber Furnaces

For strip and foil coils, billets and slabs

- Protective gas annealing
- Nozzle system for high heat transfer
- Self-recuperative burners
- Homogenization of billets and slabs
- Supplied with fully-automatic charging machines



Soaking Pit Furnaces

References up to 470 t furnace load

- Flexible charging for variety of slab dimensions
- Highly-efficient self-recuperative burners
- Strong, spring-loaded supporting structure
- Individually-controlled furnace zones



Compact Coil Furnace

Next generation single coil furnace

- Energy savings of 75 %
- Inert gas savings of 55 %
- Flexible production
- Easily-adaptable design
- Short installation time
- Integration into existing coil handling systems
- Furnace array can be equipped with an automatic handling system
- Reduced workshop building height required
- Fully-automated (operator-free) plant possible

Gautschi incorporates highly-efficient recuperative burners with minimized heat losses into its heat treatment furnaces, to benefit both the environment and the customer. High-convection heat transfer and optimized process technology ensure the best anneal results, combined with maximum throughput.

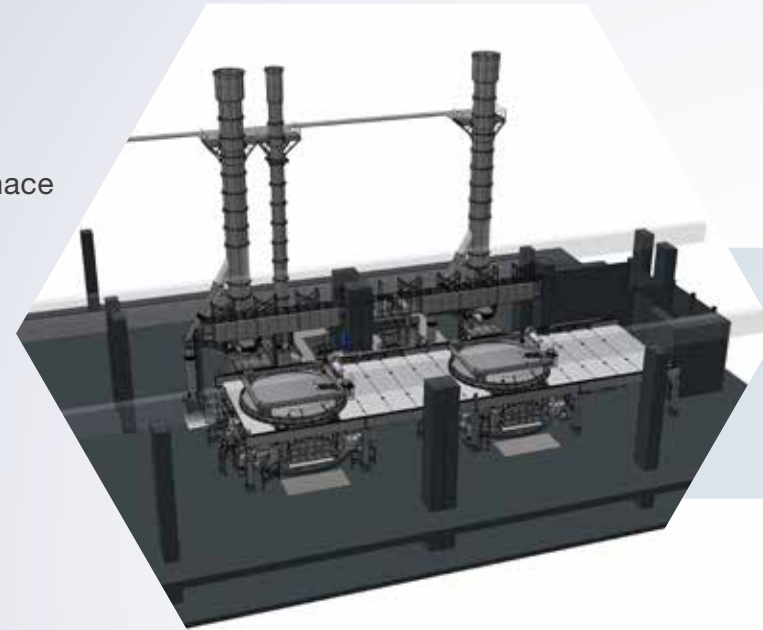


Complete Casthouses

As a member of the **EBNER GROUP**, Gautschi is the market-leading expert in the field of liquid metal furnaces. The companies that form the **EBNER GROUP** value each other's expertise and mutually support one another. This allows Gautschi to benefit from synergies that add value and promote the market presence of the **EBNER GROUP** as a whole: the full solution provider.

Remelt Plant

- From in-house rolling mill scrap to new rolling ingots
- Includes:
 - 2x Stationary Round Top Charged Melting Furnaces 115 t
 - 1x Rectangular Tilting Holding Furnace 105 t



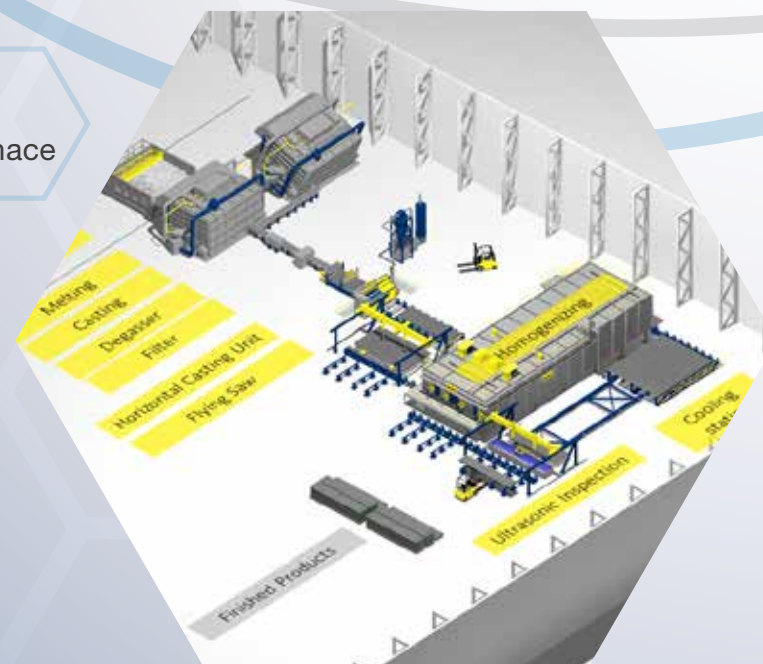
Aluminum Scrap and Dross Remelt Plant

- From scrap to foundry alloy ingots
- Includes:
 - Charging Machine
 - MASTERmax HRT Furnace
 - Transfer Launderers
 - Gautschi WVE furnaces
 - HPI Horizontal Casting Plant for ingots
 - HPI Automatic Stacking and Packing equipment
- Only 2 operators per shift



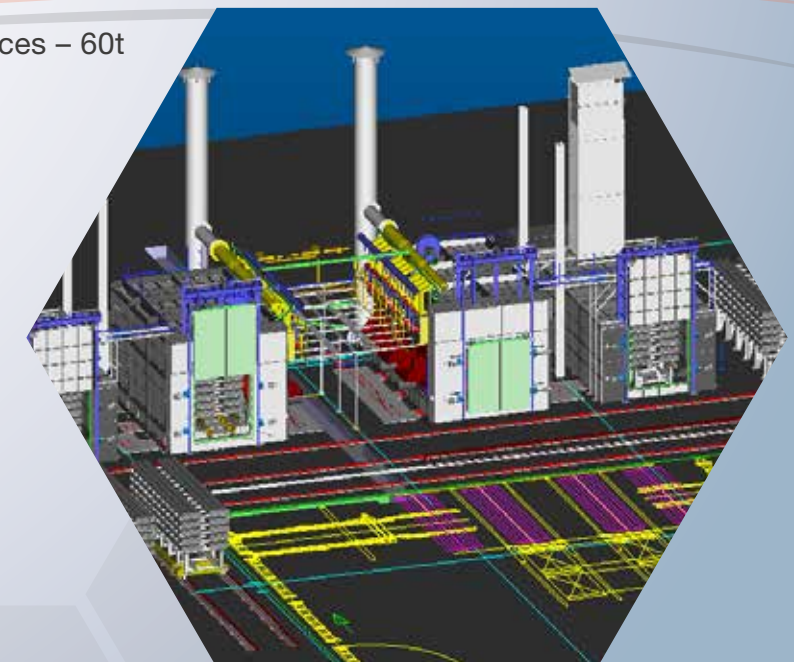
Aluminum „Flex“ Remelt Plant

- From scrap to ultrasonic-tested billets in a continuous production line.
- Includes:
 - HPI Charging Machine
 - 2x Gautschi SWVE
 - HPI Launder System incl. Filter and Degasser
 - HPI Horizontal Casting Facility
 - HPI Continuous Homogenizing Furnace
 - HPI Automatic Sawing and Packing Equipment
- Only 2 operators per shift



Billet Heat Treatment Plant

- Fully automated heat treatment processing of extrusion billets
- Includes:
 - 2x Batch Homogenizing Furnaces – 60t
 - 2x Cooling Chambers
 - 1x Charging Machine – 75t





Casthouse (R)Evolution Center

Along with our sister company, HPI High Performance Industrietechnik GmbH, we operate one of the most modern casthouses for both vertical and horizontal casting in Ranshofen, Austria: the Casthouse (R)Evolution Center (**C-R-C**).

In the Casthouse (R)Evolution Center, the unique casthouse for aluminum continuous casting trials, we work with international customers to develop innovative solutions for a green and sustainable future.

We are a full-scale industrial foundry, offering a horizontal casting facility operated by HPI and a vertical casting facility operated by Gautschi. Both facilities are available for customer demonstrations, alloy trials, operator training, and small, quick and/or special production runs. Over and above this, active employee training is offered and future applications conceptualized.



Alloy Development



Training



Sample Material

Technology Management, Research & Development

Technology Management and Research & Development at Gautschi are firmly linked to take a different path, avoiding the usual and ordinary. Our teams focus on advancing results-oriented technology to reinforce our mission of being a full solution provider, in every area from scrap processing to casting. Current projects are directed at designing process chains for systems and evaluating improvements to equipment so that it can meet or surpass future performance and regulatory requirements. These efforts include refining existing combustion technology to meet emission standards and conceptualizing revolutionary plant and combustion systems meant to exceed industry expectations.

Our teams also focus on developing best practices, with an emphasis on excellence and safety, to drive performance to new levels – in line with business objectives that balance profit, people and environment. With an established track record, our employees continue to synchronize organizational gearboxes: they support process engineering and sales management in an environment of high challenge and growth, with considerable opportunities for advancement and learning.

A LITTLE SNEAK PEEK
IN OUR CASTHOUSE



Customer Service Department

At Gautschi, our Customer Service Department is committed to anticipating our customers' needs and delivering tailored solutions—anywhere in the world, supported by our locations in Austria, China, and the United States.

The expertise and experience of our team are concentrated in three core areas:

Spare Parts Sales

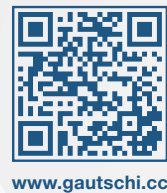
- Customers benefit from fast, reliable, and cost-efficient delivery of all types of spare parts, ensuring minimal downtime and maximum productivity.

Technical On-Site Service

- We offer a comprehensive range of on-site services designed to ensure the long-term, trouble-free operation of your facility.

Upgrades & Rebuilds

- Our specialists provide targeted upgrades and innovative modifications to existing systems, bringing them up to the latest technical standards and enhancing overall performance.



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Where Innovation meets Efficiency

Within the framework of sustainable production, Gautschi focuses on the environment and has developed facilities with an exceptional degree of energy efficiency.

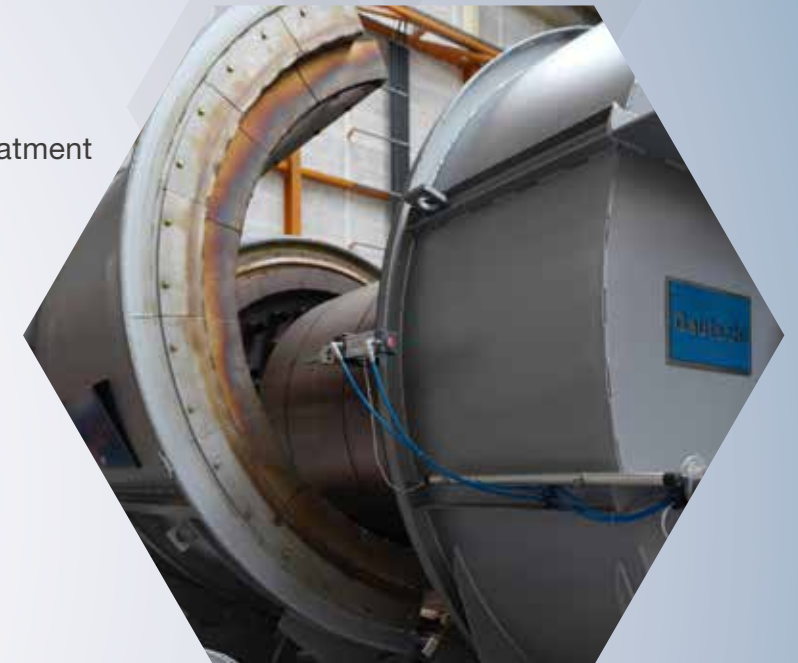
Through the development of new technologies such as energy recovery, light-weight work-bases and combustion air preheating, Gautschi has continuously improved the energy efficiency of its facilities.

The Smart Burner Development for low emissions and the Compact Coil Furnaces with high-grade-energy efficiency in the annealing process are just 2 of many examples.

Gautschi recognizes the responsibility we have towards the environment.

Compact Coil Furnace Zero Emissions

- Electric heating elements for heat treatment furnaces to enable the use of green electricity
- CO₂ and pollutant emissions-free
- Energy saving of 75%
- Inert gas savings of 55%
- Up to 55% lower energy requirement for heating the inert gas
- High convection heat transfer



Solutions for Melting Furnaces Aluminum Recycling Process

The Gautschi Multi-Chamber Furnace and the Rotary Tilting Furnace concept enable the remelting of organically contaminated post-consumer scrap.

- Melting is the heart of the aluminum cycle.
- Recycling of one kilogram of aluminum leaves almost 95% less carbon footprint than creating one kilogram of primary aluminum.

About 75% of all aluminum products ever produced are still in use today, such as car or airplane parts, window profiles, or packaging material. About 35% of the aluminum produced annually is recycled secondary aluminum from scrap.

Industrial scrap and post-consumer scrap are collected, processed, and, if necessary, mixed with primary aluminum to produce alloys suitable for new components for the transport, construction, or packaging industries.



GET IN TOUCH WITH GAUTSCHI



USA



AUSTRIA



CHINA

