RAILWAY SYSTEMS
by voestalpine

ENVIRONMENTAL STATEMENT 2025

of voestalpine Rail Technology GmbH

voestalpine Railway Systems
www.voestalpine.com/railway-systems

voestalpine
ONE STEP AHEAD.

Environmental Statement 2025 in accordance with the Council Regulation (EC) No 1221/2009 (EMAS III) on the voluntary participation by companies in a Community eco-management and audit scheme (EMAS Regulation).

voestalpine Rail Technology (NACE-Code C24.10.-0)

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FOREWORD BY THE MANAGEMENT

voestalpine Rail Technology GmbH, a company of voestalpine AG, produces steel rails in many grades and profiles.

The plant is located in Donawitz, in the upper Murtal valley, about 60 km northwest of the Styrian capital Graz. The products of this long established location are exported to more than 60 countries around the world.

We see it as our duty to pay attention to ecological as well as economic aspects in all our activities within the company. This applies to our work within the company itself, but also to our external activities, in particular to our rail product, which is a core element of the most environmentally friendly means of transportation, the railroad.

Our efforts to achieve environmentally friendly production processes through constant investment are significantly supported by the commitment and dedication of our employees in the “continuous improvement process” and further strengthened by the operation of the environmental management system in accordance with EMAS and EN ISO 14001. By involving everyone, we have achieved and brought to life the goals set and agreed in these systems. Following the achievement of these goals, further goals have been formulated for many topics, which challenge us again to shape the future.

The ever-increasing transparency of our business operations enables us to better measure and communicate the success of this work both internally and externally. This in turn is an incentive for further changes and ongoing optimization. Together with our customers and partners, and with the help of experts, we want to shape the characteristics of our rail product in such a way that we can make a contribution to the further improvement of rail as a means of transportation.

The high level of performance that voestalpine Rail Technology GmbH has already achieved through continuous improvements is based, among other things, on state-of-theart production facilities and comprehensive facilities for state-of-the-art testing and quality assurance.

voestalpine Rail Technology GmbH was the first European rail manufacturer with ISO 9001 certification. In 1998, environmental certification according to ISO 14001 and EMAS followed, in 2001 certification for safety according to OHSAS 18001 (now health and safety protection according to ISO 45001) and in 2012 certification for energy according to ISO 50001.

The basis of the performance advantage is founded on the know-how and wealth of experience of the 130-year company history of the Donawitz site, the commitment and skills of around 700 highly qualified employees and the drive of everyone involved to constantly improve and take responsibility. Responsibility towards customers, employees and society as well as responsibility towards the environment.

COMPANY HISTORY

1837 First flat-headed rails made from bloomery iron

1850 First rail heads made from puddled steel (wrought iron)

1857 Annual production of 9,000 tonnes at Zeltweg according to the process of Peter Tunners

1869 First rails made from SM steel (SM = Siemens-Martin process)

1900 Donawitz builds SM steel mill and takes over rail production from Zeltweg

1928 Production starts of wear-resistant rails. Rails made from electric furnace steel in Donawitz

1932 Swiss Federal Railroad Company uses wear resistant rails from Donawitz on their mountain lines

1954 Austrian and Swiss Federal Railroad Companies approve L.D. rails

1976 Linz experimentally produces blooms of the S900A quality by means of the continuous casting process, which are then rolled at the Donawitz site

1980 Start of the continuous casting plant for blooms

1982 Donawitz is the first mill in Europe to produce rails from continuously cast steel

1990 Donawitz produces head-hardened rails (HSH rails) from rolling heat. Start of rail production in lengths of up to 120 m

1998 Production of 45.5 % of voestalpine Eisenbahnsysteme GmbH (production of turnout) by the voestalpine Stahl AG

2000 Commissioning of the compact LD steel mill at the Donawitz site

2002 Opening of second fully automated long goods warehouse

2006 Construction and commissioning of the new rail rolling mill

2009 Construction and commissioning of the new double heat treatment plant (DHTP)

2010 Construction and commissioning of Saw III

2011 Founding of Rail Research Center

2012 Installation of Open depot cranes 1 and 2

2013 Construction of roller maintenance workshop

2016 Commissioning of new walking beam furnace

2019 Awarded 20 years EMAS-certification

2022 Modernization of the horizontal and vertical roller straightening machine

2023 Market launch of the Dobain grade

2024 Renewal and reinforcement of the walking beam cooling bed, modernization of the cooling system

2025 Retrofit and modernization of the long rail storage system 2

ENVIRONMENTAL MANAGEMENT SYSTEM

Development of environmental protection

Active environmental protection has been practiced at the Donawitz site since the 1970s. Following the division of the Donawitz site under company law in the 1990s, each company became responsible for its own environmental issues. At the end of 1996, voestalpine Schienen decided to set up and implement an integrated environmental management system (EMS). The project to set up the EMS was launched in September 1997.

The validation of the EMS in accordance with EMAS and certification in accordance with ISO 14001 took place in 1998. Consistent implementation of the set goals has led to great success in terms of the environment and the company profit.

Organization of environmental protection

As an integral part of corporate policy, environmental protection is a "management issue". The management defines the environmental policy and is responsible for the regular review of the environmental management system. The annual management review, in which the results of the environmental audits are presented, serves as a tool for assessment.

The Environmental Management Officer reports directly to the management and is responsible for the implementation and application of the management system. The officer is responsible for the implementation of environmentally relevant work processes. In addition, the Environmental Management Officer is the central point of contact for authorities, customers and interested members of the public.

Environmental audits

Independent experts review the environmental objectives and the effectiveness of the measures taken on an annual basis. The results of these environmental audits, also known as internal audits, are summarized in a report known as a management review. The management assesses the management review and determines the extent to which the set goals have been achieved. This is followed by a review of existing environmental goals and measures, and the formulation of new ones.

Just as the quality management system entails a continuous increase in quality in all process and work stages, our environmental management system (EMS) encourages the continuous improvement of environmental performance. This includes ensuring legal compliance, the use of resources and energy as well as all emissions.

The environmental impact of all production processes, as well as potential emergency situations, is continuously monitored. The implementation of the environmental policy and the environmental objectives is ensured by the implemented environmental management system. The voestalpine Rail Technology GmbH management manual documents the EMS in accordance with ISO 14001 and EMAS III as part of the management system in accordance with ISO 9001, ISO 50001 and ISO 45001. The detailed implementation is regulated in procedural and working agreements. By integrating the environmental management system, all EMAS III and ISO 14001 requirements are met.

LEGAL COMPLIANCE

A list of applicable laws, regulations and EU directives is constantly monitored by the externally maintained KEC Lextool database. Those responsible are informed of any changes and, if necessary, measures are taken. The legal department is consulted in the event of any uncertainties. Furthermore, in April 2009 the consolidated decision for the entire voestalpine Rail Technology GmbH was drawn up and approved by the Leoben district authority.

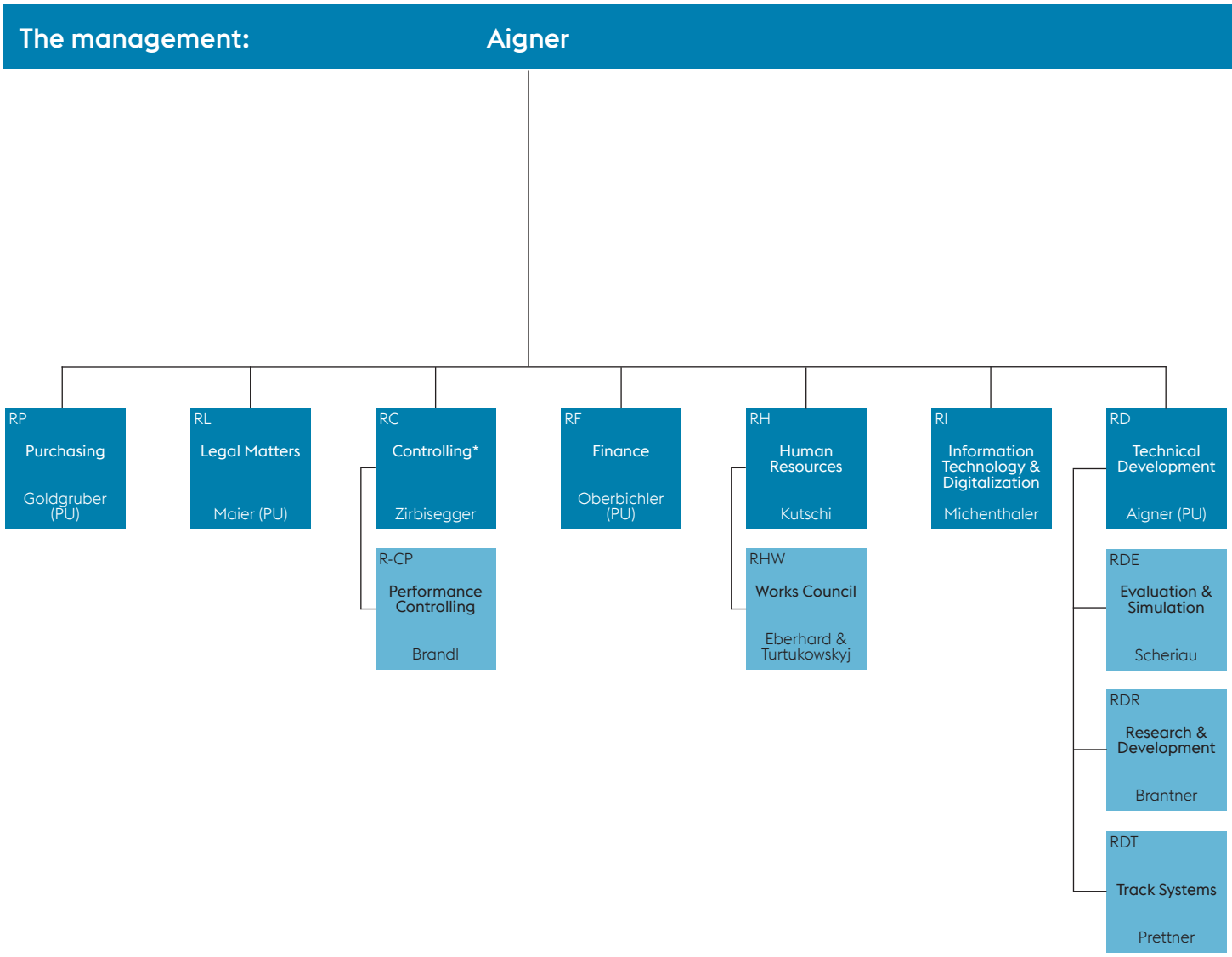
In the case of new new production plants or changes to existing plants, the projects are re-approved by the Leoben district authority and these decisions are continued as individual decisions alongside the consolidated decision. The resulting requirements were randomly checked in 2014, 2017, 2020 and 2023 in the course of environmental inspections and found to be in order. voestalpine Rail Technology GmbH is an indirect discharger and forwards its wastewater to voestalpine Stahl Donawitz GmbH in accordance with an indirect discharger agreement in the quality and quantity specified therein.

voestalpine Rail Technology GmbH continuously implements energy efficiency measures and documents these in order to comply with legal requirements.

A quarterly meeting is held to ensure compliance with the latest changes in legislation. Compliance with the law is reviewed and evaluated by the management at least once a year as part of the management review. This guarantees that all legal requirements of voestalpine Rail Technology GmbH are complied with.

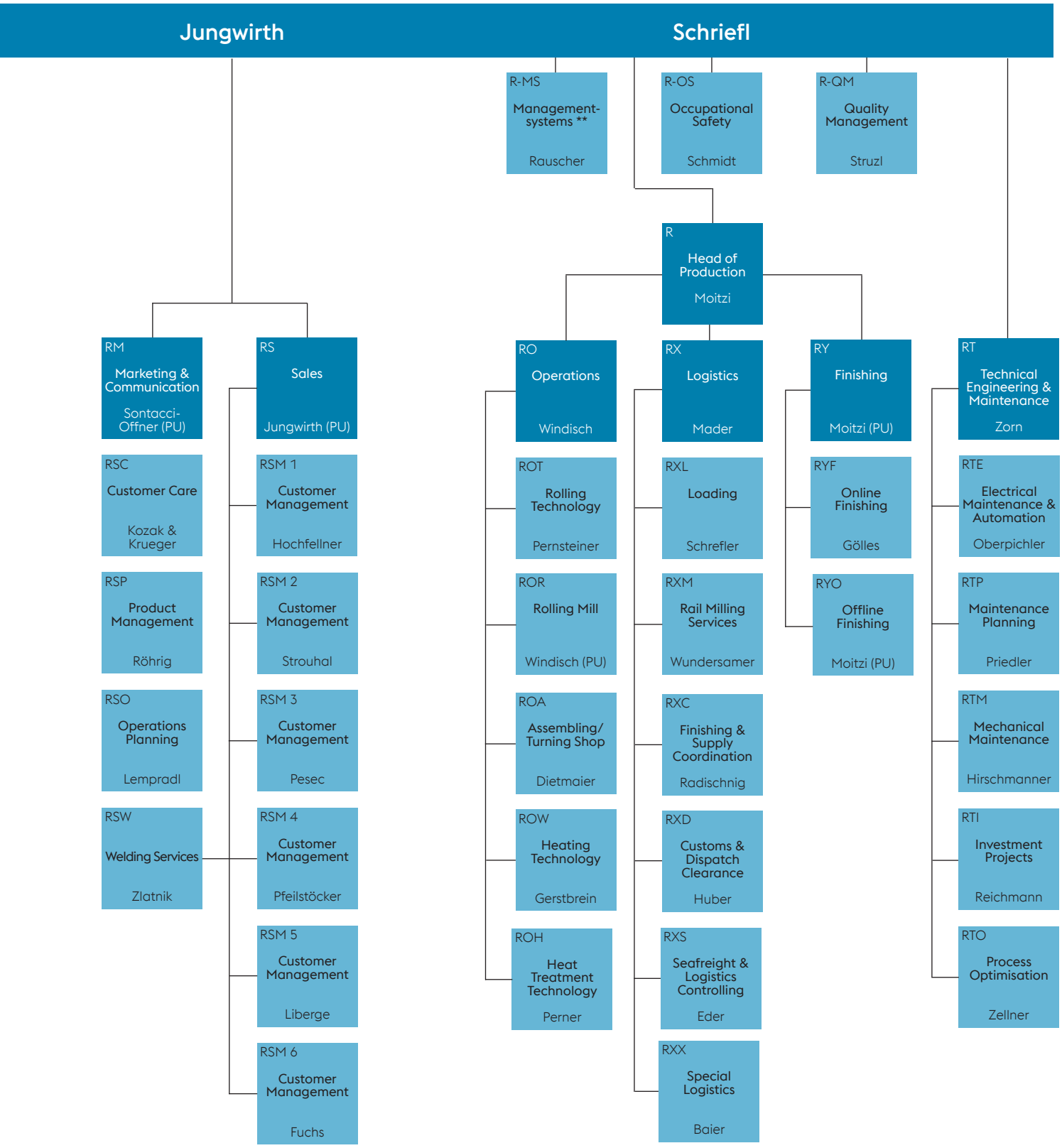
ORGANIZATION CHART

Status 01.11.2024



* incl. Risk Management
** Environment, Quality, Energy, Safety

voestalpine Rail Technology GmbH is part of voestalpine AG and is assigned to the Metal Engineering Division. The detailed structure of voestalpine Rail Technology can be seen in this organizational chart:



MANAGEMENT POLICY OF voestalpine Rail Technology GmbH

Status April 2024

As an innovative company, voestalpine Rail Technology GmbH is committed to the overriding principles of the environment, quality, occupational safety, energy, sustainable development and social responsibility. In order to take these concerns into account and to subject day-to-day implementation to a high standard, fundamental principles have been defined, which are outlined below. The integrated management system must comply with the requirements of ISO 9001 and ISO 14001, the rules of the EMAS regulation, ISO 45001 and ISO 50001.

Our management policy for the environment, quality, health and safety, and energy

For us, quality means fulfilling the

- the requirements and expectations of internal and external customers and suppliers
- market requirements, in particular just-in-time deliveries of ready-to-install, ultra-long, head-hardened rails
- development, production and delivery of products and services that meet customer requirements and expectations.

For us, environmental protection and energy means

- continuous reduction of environmental impact
- compliance with environmental and energy-related legislation and other binding obligations
- taking environmental impact into account in the development, manufacture, delivery and recycling of our products
- the avoidance of accidental emissions and ongoing monitoring in accordance with the environmental policy and its objectives
- open communication with the public, customers, suppliers and authorities
- that contractual partners working on the company premises comply with our environmental regulations
- best possible conservation of resources
- continuous improvement of energy efficiency
- making the best possible use of existing energy
- design-related activities that take into account the improvement of energy-related performance
- procurement of energy-efficient products and services.

For us, health and safety means

- compliance with applicable occupational health and safety laws and other requirements that the organization has committed to fulfilling
- maintaining and promoting the health of our employees through active preventive measures
- open communication with employees, interested parties and authorities
- continuous development and implementation of measures to prevent accidents, and work-related illnesses, and promote heath
- continuous improvement of occupational health and safety performance
- ongoing hazard identification, risk assessment and risk control of hazards for employees and third parties
- obligation of all employees and contractual partners to comply with occupational health and safety regulations and active cooperation
- age-appropriate working is a constant goal.

Quality, environmental protection, energy, and occupational health and safety are equally important corporate goals for us. A sense of responsibility for the environment, energy, quality, and health and safety is promoted to every employee through the “continuous improvement process (CIP)” and reinforced by appropriate further training measures. The management regularly monitors and assesses the effectiveness of the integrated management system.

Eva Aigner

Nadja Jungwirth

Wolfgang Schriefl

PRODUCTS

The product portfolio of voestalpine Rail Technology GmbH now comprises over 130 different profiles, ranging from classic railroad rails (vignole rails), grooved rails and switch construction profiles to crane rails and conductor rails.

The rail product requires continuous investment and technical development, which is subject to four basic criteria: safety, economy, ecology and journey comfort for our customers and their passengers.

The aim of voestalpine Rail Technology GmbH is therefore to realize these maxims in a practical manner. Through a series of fundamental innovations, the product range has grown into a unique portfolio of products and services.

120 m rails (ultra-long)

True to the company motto “ONE STEP AHEAD”, voestalpine Rail Technology GmbH set new standards in railroad construction back in the 1990s with the production of railroad rails up to 120 m long. These ultra-long rails can minimize the number of welding joints, which always represent a point of inhomogeneity and therefore a potential source of faults in the track, thus ultra-long rails significantly increasing the reliability and availability of the entire track.

The possibility of “just-in-time delivery” directly to the construction site eliminates the need for intermediate storage – a significant logistical advantage for our customers. Ultra-long, non-welded, highly resistant railroad rails not only have economic and technical advantages, but also ecological advantages. New types of rail steel enable a longer service life, extend maintenance intervals and thus contribute to the technical and economic optimization of the railroad system.

HSH Vignol rails

It is not only high-speed trains and heavy freight trains that are placing ever greater demands on the loadbearing capacity of railroad tracks around the world, the forces acting on mixed traffic are also constantly increasing as a result of ever shorter train cycle times. voestalpine Rail Technology GmbH has developed the globally patented HSH® (Head Special Hardened) heat treatment process for this purpose.

In this process, the rail head of the rail coming directly from the rolling process (“rolling heat”) is immersed in a special hardening medium. This creates a high-strength, fine pearlitic steel structure in the rail head, while the rail remains ductile and fatigue-resistant in the base. The fine pearlitic structure in the rail head results in extremely high resistance to wear and rolling contact fatigue.

HSH technology increases the service life of a premium rail by a factor of three (350HT HSH®) compared to a standard rail. For the super-premium grade 400 UHC® HSH®, the improvement factor is six. Additionally, HSH technology enables the production of the bainitic rail 340 Dobain® HSH® with a minimal amount of alloy additives.

HSH grooved rails

Grooved rails are mainly used in the mass transit sector (streetcars), where the rails are exposed to extreme wear in narrow curves. As the world’s only manufacturer of heattreated grooved rails, voestalpine Rail Technology GmbH has found two answers to the adverse conditions in mass transit. Rails in grades R340GHT and 400GHT® follow the “put-in-and-forget” strategy and are characterized by the highest possible wear resistance and service life for our customers worldwide.

In contrast, the R290GHT and 290GHT-CL rail grades focus on extending the service life through optimally coordinated repair welding cycles. This leads to significant savings and thus considerably reduces maintenance costs. The fine pearlite structure significantly increases wear resistance compared to conventional grooved rails.

High-performance rails

With the rail grade 400 UHC® HSH®, voestalpine Rail Technology GmbH has already set a new milestone in the direction of maintenance-optimized rails in recent years. Following an innovative material concept, this rail grade has a further improvement factor of two compared to an R350HT. For this reason, rails of grade 400 UHC® HSH® are not only used as a standard solution for heavy loads, these rails are also becoming increasingly popular for mixed traffic and metros.

The latest development, grade 340 Dobain® HSH®, enables railroad operators in the mixed traffic sector to reduce their maintenance work to a minimum. Thanks to the special bainitic material structure, this rail is particularly suitable for use against head checks, a type of rail damage that has become a major cost driver in maintenance, compared to conventional pearlitic rail steels.

In addition, we are constantly working on the development of new rail steels. All of this is aimed at providing our customers with optimum technical and economic solutions for their challenges.

CUSTOMIZED ADVICE AND SERVICES

In addition to high-quality rail products, voestalpine Rail Technology GmbH offers its extensive knowledge of the entire wheel-rail contact and railroad superstructure system as a service. The consulting and service portfolio includes, among other things:

System optimization:

- Rail and track tests and approval tests
- Wheel-rail contact analyses and optimization
- Analysis and optimization of superstructure performance
- Track measuring points for load monitoring and analysis ofinteractions in the superstructure
- Analysis and optimization of the life cycle costs (LCC) of rails and superstructure

Inspection and maintenance:

- Rail inspection in the track
- Examination and analysis of rail damage in the track (rolling contact fatigue, wear, slip wave formation, etc.)
- Damage analysis for rails and welds
- Advice on the selection of suitable strategies for rail processing and maintenance
- Optimization of life cycle costs (LCC)
- Mobile rail milling

Welding technology:

- Training courses on aluminothermic welding processes
- Manual electric welding training
- Repair and build-up welding of switches
- Training courses on autogenous flame cutting
- Lectures and workshops on all aspects of welding technology
- Acceptance of welds
- Support with the creation of welding instructions
- Damage analysis for rails and welds
- Adjustment and optimization of flash butt welding machines and their programs

PRODUCTION PROCESS ROLLING MILL

Bloom store

The majority (80 %) of the delivered blooms are temporarily stored in the bloom store before they are used in the walking beam furnaces. 12 - 16 % of the blooms coming from the steelworks can either be used directly or stored temporarily in the soaking pits.

Soaking pits

The six soaking pits are used for controlled holding, delayed heating and cooling of blooms. Thanks to optimum insulation, the blooms can be temporarily stored for several days without significant heat loss. Direct use or intermediate storage in the soaking pits allows the blooms to be used at a higher initial temperature. This means energy savings in the walking beam furnace.

Walking beam furnace

The blooms are heated to an average rolling temperature of 1,200 °C in the six furnace zones with a total of 94 natural gas burners. The heating time is three to four hours. The emissions generated by the natural gas-fired walking beam furnace are regularly checked for compliance in accordance with the with the legally prescribed requirements.

Significantly reduced natural gas consumption can be achieved through optimized operation of the walking beam furnace and by utilizing a high proportion of hot blooms.

Breakdown mill (BDM)

The high-pressure water descaling system, descales the blooms as they exit the walking beam furnace. The water nozzles are placed around the rolling table. Within 7 to 17 passes, the breakdown mill further rolls out the blooms to the pass section required by the finishing mill or to the square billet profile of 130 to 225 mm. The mill scale, which is transported away in its own waterrinsed scale channels, is collected in a settling tank and then recycled.

Profile finishing mill (UFR, Ultra-flexible rail mill)

After leaving the profile roughing mill (BDM), the rolled bloom is fed to the infeed roller table of the profile finishing mill (UFR) via a roller table and a cross-bearing device. The cross-carrying device prevents the surface of the rolled material from being damaged by sliding.

High-pressure water descaling at 260 bar on both sides of the rolling mill and intensive maintenance of rollers, guides and roller tables result in a consistently high surface quality. The mill scale, which is removed in separate water-rinsed scale channels, is collected in a sediment tank and then recycled. The bloom format used guarantees a minimum forming degree of 10 even with the heaviest rail profiles. The branding marks (relief) are rolled in the final rolling pass of the UFR. A hot stamping machine is approximately positioned 15 meters after the finishing mill. This machine stamps the heat and bloom numbers into the web of the rail according to the corresponding specifications and standards.

Walking beam cooling bed with integrated heat treatment unit

Using the remaining rolling heat, the rail head of the finished rail profile is immersed in the heat treatment system, consisting of two HSH immersion tanks (HSH= Head Special Hardened), depending on the customer's requirements. The rail is cooled in such a way that a high-strength, fine pearlitic material structure is created. Once the heat treatment is complete, the rail is transferred to the cooling bed. To prevent any damage to the surface, the rails are gently moved by a transverse conveyor.

An additional cooling system is installed in the cooling bed to ensure that optimum temperatures can be reached quickly during the summer season. Water is finely sprayed from below, the droplets wet the rail surface and increase heat dissipation by evaporation.

Horizontal and vertical roller straightener

The rails, which are cooled to less than 50 °C on the cooling bed, are fed into the roller straighteners using a manipulator in order to deliver a flat and straight product in accordance with the customer's requirements. Roller straightening takes place in a horizontal and vertical plane. During this constant alternation between plastic and elastic deformation, scale is produced again, which is collected and recycled via a central conveyor system.

Important production steps

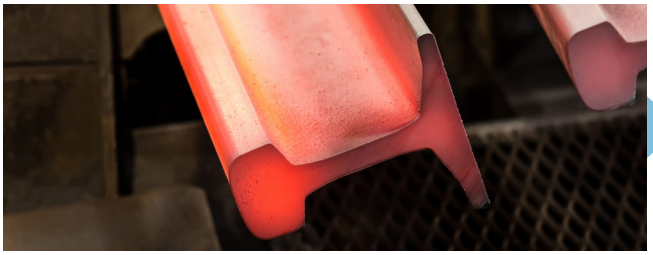
Bloom store

Walking beam furnace

Finishing rolling mill

Pre-rolling mill

HSH® heat treatment

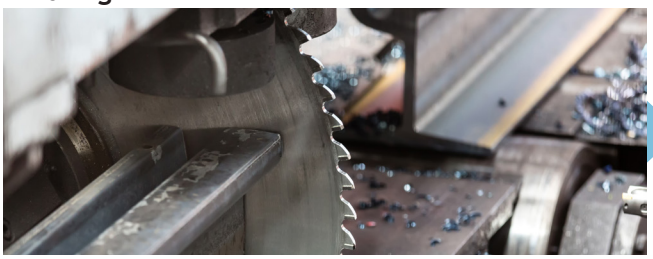


Cooling bed

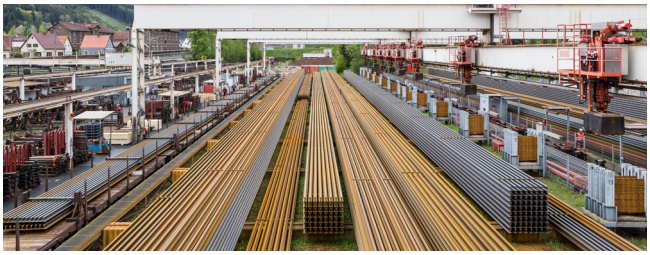
Test center

Straightening machine

Finishing



Warehouse



PROCESS NON-DESTRUCTIVE TESTING

Testing the rails

All rails manufactured by voestalpine Rail Technology GmbH are tested directly after the production line using reliable nondestructive testing methods in accordance with applicable standards and customer specifications. Cold profile measurement, automatic visual surface inspection (laser light section technology), flatness measurement (laser technology), crack testing (eddy current technology) and testing for internal defects (e.g. inclusions) (ultrasonic technology) are used to ensure that the rails are free of defects. Nondestructive testing enables comprehensive 100 % quality control of the rails. All tests are carried out in a continuous process at 1.5 m/s.

The entire rail production process at the Leoben/Donawitz site is carried out in accordance with quality assurance measures defined in the quality assurance manual. The quality assurance system complies with the guidelines of the ISO 9001 standard and is regularly certified.

PRODUCTION PROCESS FINISHING LINE

Checkpoints (inspection)

After leaving the inspection center, rails with a detected rail defect are inspected by trained personnel and, depending on the result, released directly for dispatch, reworked on the surface or marked for rejection.

Straightening presses

In the next step, the distortion occurring at the rail ends is corrected using modern four-sided straightening presses in accordance with the customer specification.

Saw drill line 1, 2 and 3

On one of three cold saws (SBL - saw-drill line), the two non-directional ends are removed from the roll-length rails and cut to the lengths required by the customer. If required by the customer, up to 3 holes can be drilled simultaneously in the rail web at each end. These units are operated without coolant or lubricant during sawing.

The specified samples for destructive testing are also cut on these cold saws. The sawing waste is collected and reused as scrap for the production of crude steel.

Rail end inspection

On inspection beds, the rails are checked for dimensions and straightness by qualified personnel using specially manufactured measuring gauges and templates. The gauges used are made of specially hardened steel with greater resistance to deformation and wear. Barcode labels are affixed to the front of the rails for efficient identification. These offer greater flexibility for process integrity. At the customer's request, further information can be attached to the rail according to the customer's specification.

To prevent damage when manipulating the rails, the inspection beds are equipped with plastic pads.

Offline adjustment of finished goods

Further straightening presses are used to produce the straightness of the rail ends required by the customer if this has not been achieved directly from the inline production on the roller straightening machines. For further processing of the rails (especially for grooved rails), a drilling/milling machine (for tie rod holes) and a bending machine (for the production of curved rails) are used.

Rail bearings 1 and 2

Ready-to-ship rails with lengths of up to approx. 60 m are either loaded directly onto wagons or trucks using semigantry cranes or temporarily stored in stacks in the open-air warehouse.

Long rail storage 1 and 2

For rails longer than 60 m, two long rail warehouses are available for rails up to 120 m long. In order to meet the increasing demand for "just-in-time" deliveries of long rails to the construction site, the first automated long rail warehouse with a capacity of 6,000 tons was put into operation in 1994. The rails are stored and retrieved using an automated crane system and controlled by a central computer. In order to increase capacity and meet rising demand, the company invested in a further long rail warehouse with a capacity of 9,000 tons.

ACCEPTANCE TESTS

The acceptance tests are carried out in accordance with EN13674 in the certified laboratories of voestalpine at the Donawitz site. The participation of the customer or a customer representative is possible by arrangement.

If no cold stamp is used during the test, the rails are labeled with a sticker at the end of the rail. This barcode label contains all information in accordance with the specification.

SUSTAINABILITY IN RAIL PRODUCTION

Throughout steel and rail production, particular attention is paid to a sustainable value chain, energy- and resourceefficient production processes and the application-optimized use of products. An integrated, continuous improvement system is used to constantly develop and optimize production processes. High investments in research and development accelerate the development of new technologies and products.

The energy supply at the voestalpine production site in Donawitz is largely self-sufficient. In 2019, more than 90 % of electricity was generated on site by using process gases, hydropower and photovoltaics. Sustainable water management at voestalpine is characterized by the multiple use of water, recycling management and the tightest tolerances when returning water to the original watercourse.

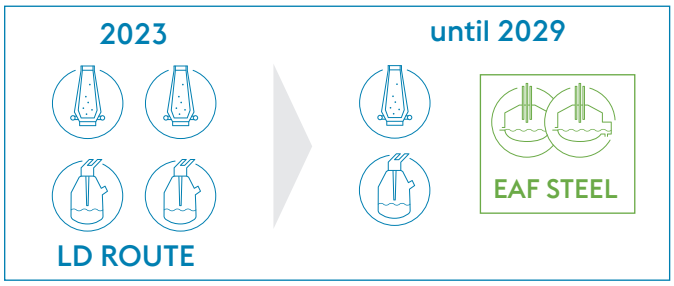
The innovative energy concept of voestalpine Stahl Donawitz GmbH enables the use of process gases to generate electricity as well as supplying over 10,000 households in the nearby towns of Leoben and Trofaiach with district heating.

The majority of the CO_2 emissions of voestalpine Rail Technology GmbH at the Donawitz site are currently attributable to the classic blast furnace technology of voestalpine Stahl Donawitz. As a rail manufacturer, voestalpine Rail Technology GmbH is highly dependent on its steel supplier, voestalpine Stahl Donawitz GmbH. The Group-wide greentec steel climate protection program marks the start of a technological reorientation that will lead to a significant reduction in emissions.

greentec steel GmbH - THE FUTURE-FOUNDED CLIMATE PROTECTION PROGRAM FROM voestalpine

greentec steel encompasses all activities and innovations. With this investment voestalpine is on the way to steel production with net zero emissions. As part of the Science Based Targets Initiative (SBTI), the voestalpine Group is committed to reducing the sum of Scope 1 and Scope 2 emissions by 30 % and Scope 3 emissions by 25 % by 2029 compared to the reference year 2019. A green electricitypowered electric arc furnace will be installed at the Donawitz site and a coal-based blast furnace unit will be decommissioned. The environmental impact assessment procedure for the necessary upgrading of the electricity grid at the Donawitz site has been completed.

Transformation – Phase 1 until 2029



Commissioning of the EAF in Donawitz is planned for 2027.

Blast furnace | Crucible | Electric arc furnace

Milestones for green steel production

2022
Supervisory Board gives green light for climate-friendly steel production: preparations begin

2023
Supervisory Board approves investment in electric arc furnaces in Linz and Donawitz

2024
Start of construction for the two electric arc furnaces

2027
Commissioning of one electric arc furnace each in Linz and Donawitz

from 2027
2.5 million tons of CO_2 -reduced steel per year

from 2030
Further replacement of one blast furnace each in Linz and Donawitz

2050
Achievement of the target of CO_2-neutral steel production

voestalpine's long-term concept for achieving net-zero emissions by 2050 at the latest, in line with the EU emissions trading target pathway consists of several modular technology steps and options. These are aimed equally at the greatest possible CO_2 reduction effect, taking into account the actual feasibility (e.g. with regard to the availability of raw and input materials as well as renewable energies and, finally, corresponding infrastructures).

The key elements and milestones of the greentec steel climate protection program include an overview (reference year 2019 for Scope 1 and 2) for the Donawitz site:

» **By 2029: Phase 1 with a target of minus 30 % CO_2 emissions**

- Investment in an electric arc furnace powered by renewable electricity

» **From 2030 to 2035: Phase 2 with a target of minus 50 % CO_2 emissions**

- Focus on direct CO_2 avoidance through further replacement of fossil pig iron production and likely additional use of CO_2 capture and utilization technologies (carbon capture storage and utilization).

» **By 2050 at the latest: Phase 3 with the goal of net zero CO_2 emissions**

- Focus on replacing the remaining fossil pig iron capacities using fossil-free energy sources, such as "green" hydrogen and bioenergy, as well as carbon capture and storage (CCUS) with the aim of achieving the greatest possible flexibility while ensuring that the net-zero strategy is actually economically feasible.
- The final decisions will be made at a later date in line with investment cycles and in accordance with the foreseeable conditions.

The ground-breaking ceremony for the first electric arc furnace in Donawitz took place on September 13, 2023. The corresponding construction measures and the creation of the necessary infrastructure, including for the energy supply by APG (AustrianPowerGrid) and Energie Steiermark, are being implemented. The dimensions of the green-tec steel project in Donawitz are enormous: the size of the two construction sites is equivalent to around 10 soccer pitches (75,000 m^2). The necessary earth movements amount to around 100,000 m^3. The program comprises 11 independent implementation projects and is supported by a team of approximately 75 internal and external experts. Commissioning of the electric arc furnace in Donawitz is planned for 2027. An important prerequisite for the implementation of this first major stage is the sufficient availability of electricity.

MATERIAL BALANCE

Input

Quantities FY 2024/25

	Quantity	EH
Raw material:		
Steel blooms for rails and superstructure material	601,667	t
Auxiliary and operating materials:		
Oils, lubricants and chemicals	132,175	kg
Metal rollers	918	t
Refractory material	12	t
Acetylene gas	505	m^3
Packaging material	17,285	kg
Wood	1,914	m^3
Gasoline	8,257	l
Diesel	29,504	l
Energy:		
Natural gas	270,281	MWh
Electricity**	42,100	MWh
Compressed air	25,463,068	m^3
Oxygen	5,400	l
Hot water	6,215	MWh
Water:		
Drinking water	17,022	m^3
Pure water	2,021,664	m^3

Output

Quantities FY 2024/25

	Quantity	EH
Rails, steel pre-material and superstructure profiles	564,199	t
Scale	9,965	t
Process scrap	25,137	t
Rolls	327	t
Non-hazardous waste	450,615	kg
Hazardous waste	301,976	kg
Total amount of waste	752,591	kg
NOx	13.6	t
CO_2*	47,832	t
CO	7.4	t
Process waste water	2,021,714	m^3
Waste heat production HBO	50,498	MWh

* The CO_2 data is checked during the annual CO_2 verification audit by Lloyd's Register.

** voestalpine Rail Technology GmbH obtains all of its electricity from voestalpine Stahl Donawitz GmbH; the share of renewable energy amounted to 27 % last year.

KEY FIGURES FY 2024/25

The following key figures refer to the tons of rail produced:

	Quantity 2024/25	EH	Key figure 2024/25	Key figure 2023/24	Key figure 2022/23
Rails, steel pre-material and superstructure profiles	564,199	t			
Energy (natural gas, electricity, hot water)	318,447	MWh	0.564	0.538	0.559
Total annual water consumption (drinking water, clean water)	2,038,686	m^3	3.613	3.324	3.501
Hazardous waste	301,976	kg	0.535	0.600	0.820
Non-hazardous waste	450,615	kg	0.799	0.529	0.247
NOx	13,607	kg	0.024	0.023	0.042
CO_2	47,832	t	84.778	80.392	83.671

Further key figures:

	FY 2024/25	FY 2023/24	FY 2022/23	EH
Material efficiency	93.77	95.35	94.80	%
Land consumption	see land use chapter			

TOTAL ANNUAL WASTE GENERATION

The table below lists the total amount of waste generated by code number. Hazardous waste is marked with G.

Key no.	G	Designation	2023/2024 in kg	2024/2025 in kg
17201		Wood packaging and wood waste, uncontaminated, uncompacted wood packaging	105,680	138,122
17202		Construction and demolition timber	70,150	141,780
17213	G	Contaminated wood assemblies	50,070	2,690
18718		Waste paper, cardboard and paper, uncoated	15,850	14,950
31103		Furnace scrap from metallurgical processes	20,760	11,540
31106		Wood ash	416	0
31409		Construction waste (no construction site waste)	7,050	0
31437	G	Asbestos waste, asbestos dust	2,463	501
31444		Abrasives	1,875	5,385
31468		White glass (packaging glass)	0	340
31489		Casting molds and casting sand	10,350	8,610
35102	G	Scale, hammer blow and rolling sinter, hazardous	0	7,900
35102		Scale, hammer blow and mill scale	0	22,600
35103		Contaminated iron and steel waste	15,700	35,940
35103	G	Iron and steel waste contaminated	62,740	62,310
35105		Ferrous metal balances and containers	3,770	6,404
35106	G	Ferrous metal containers with residual content	8,998	8,698
35205	G	Refrigerators and air conditioners	97	268
35206	G	Air conditioners with other refrigerants	50	0
35212	G	Visual display units incl. picture tube units	150	0
35230	G	Old electrical and electronic equipment, small	7,070	9,074
35304		Aluminum mixed	0	160
35314		Cables	2,559	1,950
35322	G	Lead accumulators	0	920
35337	G	Lithium batteries	58	0
35338	G	Batteries, unsorted	0	360
35339	G	Gas discharge lamps (fluorescent lamps, fluorescent tubes)	293	90
54102	G	Waste oils	53,635	51,680

Key no.	G	Designation	2023/2024 in kg	2024/2025 in kg
54201	G	Oil sludge	25,245	18,540
54202	G	Grease	0	325
54401	G	Synthetic coolants and lubricants	21,210	21,910
54408	G	Other oil-water mixtures	73,240	29,310
54702	G	Oil separator contents	6,600	44,090
54715	G	Sludge from tank cleaning	1,940	0
54926	G	Used oil binding materials	0	1,420
54929	G	Used oil containers	48	82
54930	G	Solid grease- and oil-contaminated operating materials	28,261	27,253
55374	G	Solvent-water mixtures	0	1,000
55502	G	Old varnishes, old paints not cured	0	244
55513		Old paints, old paints cured	174	124
57108		Polystyrene, polystyrene foam	0	300
57124	G	Ion exchange resins	0	46
57127	G	Plastic membranes with residual contents	572	58
57129	G	Other cured plastic waste	0	486
59305	G	Laboratory waste and chemical residues	24	209
59405	G	Cleaning agent waste	0	50
59803	G	Compressed gas packaging (spray cans) with residual contents	1,605	1,742
59906	G	Industrial sweepings, oil-contaminated	0	10,720
91101		Municipal and commercial waste	32,308	35,910
91201		Packaging material and cardboard	0	60
91206		Construction site waste (no building rubble)	0	3,600
91207		Light fraction from packaging collection	11,950	11,200
91401		Bulky waste	4,540	11,640

Total waste	**647,501**	**752,591**
Hazardous waste	**344,369**	**301,976**
Non-hazardous waste	**303,132**	**450,615**

Internal recycling:

Key no.	G	Designation	2023/2024 in kg	2024/2025 in kg
35102		Scale and hammer blow, mill sinter	9,156,700	9,782,950

Sale:

Key no.	G	Designation	2023/2024 in kg	2024/2025 in kg
35102		Scale and hammer blow, mill sinter	3,183,400	2,219,750
17202		Construction and demolition timber	81,500	9

ASSESSMENT OF DIRECT AND INDIRECT ENVIRONMENTAL IMPACTS

An input/output balance sheet is carried out as part of the environmental audit in order to fully record all environmentally relevant effects at the voestalpine Rail Technology GmbH site. All substances recorded, such as raw materials, auxiliary and operating materials, as well as energy, are checked for their environmental relevance. The resulting finished products, waste, emissions and waste water are also included in this assessment. In addition, the indirect environmental impacts (i.e. purchasing, traffic, development, transportation, public relations) are also assessed.

The impact is assessed using a three-level scale (1 = low environmental relevance, 2 = medium environmental relevance and 3 = high environmental relevance).

The detailed guidelines for this assessment are precisely defined in an internal company procedure. This has the following consequences: substances with a high environmental impact are no longer purchased and are replaced by substances with a lower environmental impact, provided this is technically and economically feasible. If substances are indispensable for technical production reasons, an attempt is made to define measures within the framework of the environmental program that lead to a reduction.

SOIL USE

Total area	209,875m^2
Green area	20,000 m^2
Sealed Area (office building - and production halls)	67,099 m^2
Paved areas (roads, storage areas, parking lots)	122,776 m^2

The majority of the green area is used by voestalpine Rail Technology GmbH for production purposes, taking into account the preservation of biodiversity.

When designing the parking areas, the drainage areas were greened. The supplier of the loading timber is PEFC-certified. Insects, birds and hares can be found on the voestalpine Rail Technology site.

WASTE MANAGEMENT

The total amount of waste in kilograms is listed in the material balance. The hazardous substances used in production as well as the ‘hazardous waste’ generated after utilisation is treated according to the waste and safety regulations and disposed of exclusively by authorised reclamation enterprises.

The declaration of the substances to be disposed of is carried out via the statutory consignment note system, which is also used for the annual internal waste register. voestalpine Stahl Donawitz GmbH stores the data from waste material certificates and waybills in an SAP database, which is used to create an electronic waste register for several purposes (authorities, annual environmental audits, reports to the group and to the Federal Environmental Agency) for the respective requested period (calendar year or business year). The waste catalogue contains information on quantities, disposal routes and producers (place of origin) for all substances generated at the plant that are relevant from a waste management perspective, broken down by key number.

CONTINUOUS IMPROVEMENT PROCESS (CIP)

The CIP process is an internal tool that offers Rail Technology employees the opportunity to play an active role in the further development of the company. The CIP process is an active ideas policy and an element of success for quick and unbureaucratic decision-making on suggestions for improvement.

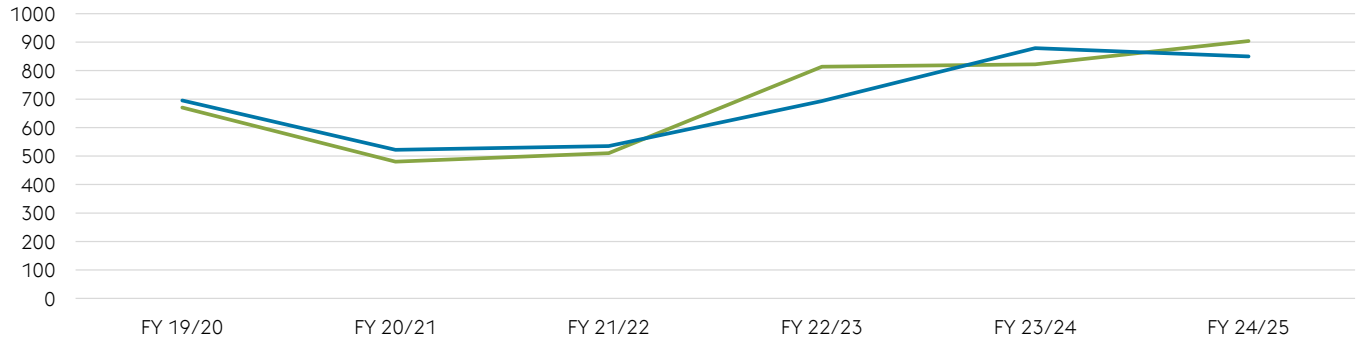
In addition, the company suggestion scheme ensures that all employees are involved in the active implementation of environmental goals. This provides an important platform for future ideas for the ecological and economic development of the company.

The following goals are pursued through idea management:

- Increased employee motivation through involvement and participation in decision-making and change processes
- Promotion of employee creativity and motivation for new approaches in day-to-day operations
- Increased motivation of managers through the creation of delegation opportunities and involving employees in the implementation of suggestions made
- Optimization of work processes, systems and information flows
- Utilization of knowledge, experience and team spirit
- Promotion of a motivating and satisfying working atmosphere

The following chart shows the development of the ideas received (green line) and completed (blue line) ideas:

Year	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25
Received	670	480	510	814	822	904
Completed	695	522	535	693	879	850



CASE STUDY OF AN ENVIRONMENTAL PROTECTION IDEA

Grease removal point UFR washing cabin

An excellent idea on the subject of “environmental protection” has once again made our company a little better.

During the high-pressure cleaning of the baskets, the grease extraction point is contaminated with scale and dirt. The grease buckets in stock are also soiled and some of them have to be disposed of. This results in increased grease consumption.

before

The employee’s idea

» Installation of a suitably protected extraction point.

after

Advantage

» Tidiness and cleanliness at the workplace as well as savings through reduced grease consumption.

CONCLUSION CORPORATE GOALS FY 2024/25

Topic	Goal	Evaluation	
Occupational safety	» "Safety before performance" is the basis of everything we do, and this principle is practiced by all employees and managers in their day-to-day work!	✓	LTIFR 7.8
	» Specifically, we want to reduce the **LTIFR from 9,78 to 8,0**		
Health	» Together, we aim to **increase** the health rate from 95.22 % (FY 23/24) **to 96.5 %** in the coming FY	X	not achieved Health rate 95.3 %
Human resources	» We want to be an attractive employer. We want our employees to enjoy working for us and be motivated. They are our future, which leads to a significant improvement in the engagement value. The aim is to raise the **engagement score to >50 %**	✓	Engagement value 63 %
Customers / Market	» Expansion of market presence 340 Dobain HSH through further pilot installations	✓	Further pilot installations see departmental objective RSP
	» The sales volume achieved in FY 23/24 is to be maintained in FY 24/25	X	Not quite achieved 2 unplanned shutdowns (so that approx. 14 kto can no longer be caught up)
Production	» Live cross-site cooperation, in particular between steel mill and rail rolling mill, and jointly leverage sustainable, future-oriented potentials	✓/X	Partially achieved Ongoing discussions and planning
Quality	» Redefinition of the OEE	✓	Project implemented with external support (Biedermann)
Environment, energy	» Resources are conserved by specifically reducing the consumption of utilities such as natural gas, electricity, water, and compressed air by 0.5 %. Search for new energy source for our key aggregate (walking beam furnace)	✓	Project (use of hydrogen) completed, no further implementation planned
Energy	» "Lowering of the Ultra Flexible Rolling Mill infeed roller table" project, including the installation of 39 motors with a higher energy efficiency class (IE3)	✓	Annual energy saving approx. 49 MWh (electricity)
	» Optimization of furnace burner control programming for walking beam furnace	✓	Annual energy savings approx. 2,000 MWh (natural gas)
	» Conversion to LED hall lighting	✓	Annual energy saving approx. 112 MWh (electricity)

CORPORATE GOALS FY 2025/26

Subject area	Target	Measures / actions	Date / person responsible
Occupational safety	» "Safety before performance" is the basis of everything we do; this principle is practiced by all employees and managers in everyday life! In concrete terms, we want to accidents to a **maximum of 9 in FY 25/26.**	Implementation of the occupational safety investment program and continuation of training and education on occupational safety	31.03.2026 Management
Health	» We are jointly striving to **raise the health rate to 96.5 %** in the coming FY 25/26	Measures that have a positive impact on ergonomics and the working environment, which is influenced by teamwork, are taken into account.	31.03.2026 Management
Personnel	» We want to be an attractive employer. The measures from the last employee survey are to be defined and implemented in order to **raise the engagement score from 63 % to > 70 %.**	Implementation of the measures in the annual program from the employee survey; Every year until the next survey, there is a program of individual measures and cross-period activities.	31.03.2027 Management Board
Customers / Market	» Expansion of market presence 340 Dobain HSH through a further 5 pilot installations	Realization of the plan to implement the pilots	31.03.2026 Jungwirth
	» Meet budget sales despite extensive postponements and volatility	Close coordination between production and planning in order to be able to accompany short-term developments and further implement improvement measures (quality, plant availability and performance) in all production areas: Rolling mill, test center, finishing and loading.	31.03.2026 Jungwirth
Production	» Live cross-site cooperation, in particular between the steel mill and rail rolling mill, and jointly leverage sustainable, future-oriented potential	Implement comprehensive, technical quality improvement (TQM) in operational activities as well as projects within the framework of cross-site TQM (=Total Quality Management). TQM input material assessment Maintain level of 2 %, complete detailed planning for input material logistics	31.03.2026 Schriefl
Quality	» Complete HSH process optimization project for all relevant heat-treated grades.	Project implementation	31.03.2026 Schriefl
	» Advance preliminary work for Transmet, continue alloy model together with voestalpine Stahl Donawitz and ensure Q approvals	Project implementation together with vasd and vaFSG	31.03.2026 Schriefl
Environment, Energy	» Conservation of resources by reducing consumption per medium (electricity, hot water, compressed air) by 1 % specific to the baseline.	Measures according to Excel overview of environmental measures Energy	31.03.2026 Schriefl
	» Reduce specific natural gas consumption by 3 % compared to baseline.	Avoid energy losses Process optimizations	31.03.2026 Schriefl

MANAGEMENT SYSTEMS TEAM

The integrated management systems team at voestalpine Rail Technology GmbH will be happy to answer any questions you may have about the environment, health and safety, energy and quality.

from left seated: Romana Ettl und Kerstin Amer
from left standing: Klaus Wasle, Stefanie Werschonig, Andreas Schmidt, Hermann Rauscher, Mario Radischnig, Petra Graßegger und Herwig Otto

EMAS DECLARATION OF VALIDITY

This site has an environmental management system. The public is informed about the operational environmental protection of this site in accordance with the community eco-management and audit scheme (Register No. AT-000183).

The leading and authorized signatory EMAS environmental verifier Ing. Marina Paller MBA of the environmental verifier organization.

TÜV SÜD Landesgesellschaft Österreich GmbH,
Franz-Grill-Straße 1, Arsenal, Objekt 207, A-1030 Wien,
Registration number AT-V-0003

confirms that it has verified that the site and the entire organization, as described in the environmental statement of the organization

voestalpine Rail Technology GmbH,
Kerpelystraße 199, 8700 Leoben
with the registration number AT-000183

complies with all requirements of Regulation (EC) No. 1221/2009 of the European Parliament and of the Council of 25 November 2009 on the voluntary participation by organizations in a Community eco-management and audit scheme (EMAS).

By signing this declaration it is confirmed that

- the assessment and validation were carried out in full compliance with the requirements of Regulation (EC) No. 1221/2009, as amended by EC Regulation 1505/2017 and EC Regulation 2018/2026
- the result of the assessment and validation confirms that there is no evidence of non-compliance with the applicable environmental regulations
- the data and information in the environmental statement of the organization/site provide a reliable, credible and truthful picture of all activities of the organization/site within the area specified in the environmental statement.

The environmental verifier organization TÜV SÜD Landesgesellschaft Österreich GmbH is accredited by the Federal Ministry of Agriculture, Forestry, Environment and Water Management for C24.10-0 (NACE code 2008).

Leoben on 06.06.2025

Ing. Marina Paller, MBA

National company Austria

Head environmental verifier of TÜV SÜD
Landesgesellschaft Österreich GmbH
Franz-Grill-Straße 1, Arsenal, Object 207, 1030 Vienna

If you have any questions about the current environmental statement, the company's environmental protection objectives and the measures taken to date, please contact the Environmental Management Officer, Hermann Rauscher, will be happy to answer your questions.

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