

AUSTRIA

ROLLING MILLS AND STRIP PROCESSING LINES

GALVANIZING PLANT FOR VOESTALPINE
Superior product quality to meet customers' demanding needs

Großglockner, Hohe Tauern National Park, Heiligenblut, Austria



**'ANDRITZ TECHNOLOGY HELPS US
IMPROVE OUR POSITION WITH
STRATEGIC CUSTOMERS.'**

DR. WOLFGANG LAKATA
Member of the Executive Board, voestalpine Stahl GmbH

With a crude steel production of over five million tons per year, voestalpine Stahl is one of the leading steel producers in Europe. The company develops and produces hot-rolled, cold-rolled, and surface-treated flat steel products. These include hot-dip and electrolytically galvanized strip and electrical steel strip for the automotive, household appliance, and construction industries. We spoke with Wolfgang Lakata, Member of the Executive Board and responsible for Production and Technology, about the role that Andritz has played in his company's stated goal of remaining 'one step ahead.'



STRONG AND BRIGHT – ONE STEP AHEAD

Interview with **Dr. Wolfgang Lakata**,
Member of the Executive Board, voestalpine Stahl GmbH

Experience

I am a graduate of Graz (Austria) Technical University, Technical Chemistry branch. During my 25-year career at voestalpine I have progressed from being a chemist for environmental analytics and coking to being appointed member of the Executive Board with overall responsibility for Production and Technology at our Linz facility. I am also Chairman of the Supervisory Boards of several voestalpine affiliates. The Steel Division accounts for about 50% of the voestalpine Group's sales. We operate a large, fully integrated metallurgical facility in Linz, Austria that incorporates all the manufacturing plants necessary to meet the high requirements of steel as a working material.

Customer requirements

Our customers' growth is accompanied by consistent expansion of our integrated facility in Linz. Not only must our steel have good processing properties, but the surface quality is very important. This applies to sheets and plates for visible faces (outer parts of car bodies, appliances, facades, etc.). Equally important is good service and logistics performance, expressed as ever shorter lead times. We have been developing steel materials with extremely high strength and good formability properties. At the same time, our ability to produce products with excellent appearance (bright galvanized or painted steel surfaces) has increased considerably.

Working closely with our customers, we invest heavily to ensure we have technically superior production plants. Suppliers like Andritz provide high-competence support in reaching our goal of remaining one step ahead of our competition.

Experience with Andritz

Andritz and voestalpine are long-term business partners. Our facility in Linz has several installations that prove Andritz's qualifications as a plant supplier (electrolytic galvanization line, acid regeneration for pickling-tandem mill, a strip coating line, and a hot-dip galvanizing line).

Andritz can deliver the total package – technology, quality of finish, reliability of supply, and competent erection – with a very favorable cost-benefit ratio.

Hot-dip galvanizing plant

The decision to build Hot-Dip Galvanizing Line 4 was defined in the course of an investment program to meet the needs of our most important automobile clients – higher-strength steel strip that also reduces the weight in car bodies.

Andritz supplied the mechanical equipment, annealing furnace, cooling tower, and the overall planning for this plant. The order was placed in June 2005.

The plant was engineered in close cooperation with the project team from voestalpine. In addition to Andritz's own competence in plant construction, they also integrated the input from our operator's practical experience.

The target of producing the first galvanized strip in April 2007, and then the production ramp-up in July 2007, posed a real challenge for us. The tightness of the schedule, combined with a high backlog with the machinery manufacturing companies, led to delays in the delivery of equipment.

What we appreciated in our cooperation with Andritz was the high level of mechanical engineering and working practices. The machines were pre-assembled as much as possible, which reduced the time needed to install them at our site. Through this, and its professional site management techniques, Andritz succeeded in mostly offsetting the delays.

Performance

The new system definitely fulfills voestalpine's high expectations of production quality, quantity, and availability. The expected nominal production is 450,000 tons per year, and we have exceeded planned production quantities already in the first months. I should add that production is based on 220 m/min – which sets a new standard in this area. This increase in our capacity to produce high-quality hot-dip galvanized sheet has improved our position with strategic customers.

Andritz proved its competence and experience as a supplier, as well as the reliability of its engineering and on-site construction work. An elaborate start-up plan helped us achieve a structured, targeted, and on-time start-up of our new hot-dip galvanizing plant. The project was completed within budget. The on-site safety record was close to exemplary.

Our location in Linz always has to meet the highest environmental standards. Andritz has proved to be a partner with the highest competence. The efficiency and energy performance of the furnace in the hot-dip galvanizing line generates extremely low emissions. The technology for chromium-free passivation also contributes to environmental safety. ○

A 450,000 T/Y HOT-DIP GALVANIZING LINE FOR THE PRODUCTION OF HIGHER STRENGTH STEEL STRIP WHICH CAN BE USED TO REDUCE THE WEIGHT OF CAR BODIES.

[1] The new Hot-Dip Galvanizing Line 4 at voestalpine was put into operation in 2007. In this line, up to 450,000 tons per year of steel strip are coated with zinc for high-quality applications.

[2] Detail of Hot-Dip Galvanizing Line 4 at voestalpine. This line is equipped with a direct-fired furnace, an in-line skinpass mill and a tension leveler (shown here).

[3] View of the new acid regeneration plant at voestalpine. In this plant not only is the acid necessary for pickling recovered in an environmentally beneficial way, but also high value iron oxide is produced using Andritz's WAPUR technology.

[4] Tank farm of the acid regeneration plant. The plant meets the most stringent environmental standards on emissions.



[1]



[2]



[3]



[4]