

Start-up of new reversing hot-rolling mill at Plansee Metall, Austria

# An Exceptional Rolling Mill

*Why did Plansee decide to invest in a new rolling-mill line?*

**Plansee:** The rolling mill is the centerpiece of a major investment program in one of our core business areas to optimize our production chain for flat products and create the basis for future growth. The project was motivated by the desire to increase capacity and productivity, and to improve our competitiveness with higher-quality and lower-cost products by investing in modern technology. Another aspect was to be able to produce larger product formats. We wanted to enhance our production flexibility to better satisfy customer demands under changing market conditions. Also, production times would be shorter and stocks lower, meaning less bound capital. These were the main factors. The vision of Plansee is “A step ahead in technology.” And this rolling mill, which is certainly the only one of its type in the world, reinforces our position as the technology and market leader in this field.

*The project had a relatively short tendering time and your company decided rather quickly to choose Siemens VAI as the project partner. Why?*

**Plansee:** This project was preceded by a lot of internal preparation work. And a private company, such as we are, can make decisions fast. Other related projects were going on at the same time, which meant that we had to accelerate the preproject phase. We chose Siemens VAI because of your experience and references. We looked at plants that you built, such as the rolling stand supplied to Böhler, and we saw a high degree of technical competence

and a very customer-oriented approach. This was especially important for us, because we needed a tailor-made rolling-mill solution. And then, of course, the commercial conditions were competitive. We – as a supplier to various Siemens businesses – also had good business relationships for decades. For this rolling-mill project, everything was from a single source – control, technology, equipment and A&D. Because this was a truly unique mill installation, an “off-the-shelf” solution could not apply, except for standardized parts. Therefore, partnership played a key role.

*Following your initial planning, did the project parameters change after discussions with potential suppliers?*

**Plansee:** The basic mill concept was established during the bidding phase. We needed high rolling forces, high-temperature operation and an extremely compact line with short distances and an optimized material flow. In the detail planning there were some changes, and that took some time.

*What were the tasks and responsibilities of Plansee in this project?*

**Plansee:** We were responsible for the complete construction of the building, the infrastructure, media supply and furnace technology, all of which we fully engineered by ourselves. That was the hardware side. Also in the project planning, we were heavily involved in process technology, especially with our know-how about the properties and behavior of our special materials.



Newly installed hot-rolling mill at Plansee Metall GmbH, Reutte, Austria. Dr. Wolfgang Köck (far left), Kurt Rotert (3<sup>rd</sup> from left), Heinrich Pühringer, Siemens VAI Project Manager (far right)

In December 2008, a new Siemens VAI-supplied, 4-high, reversing hot-rolling mill was started up at Plansee Metall GmbH, located in Reutte, Austria. The rolling stand is capable of exerting more than 50,000 kN of force – the strongest in the world applied for the rolling of refractory metals that include molybdenum, tungsten, tantalum, niobium and chromium. The mill configuration is also unique worldwide for its ability to roll such materials. It is comprised of a reversing rolling stand, leveler, dividing shear, slitting machine and coiler, all fully automated from the heating furnaces to the downcoiler. Dr. Wolfgang Köck, Managing Director of Plansee Metall GmbH, and Siemens VAI Senior Vice President Kurt Rotert (Business Segment Strip Rolling) discussed the project background and the benefits of this investment in this interview conducted on April 22, 2009.

*Were you satisfied with the start-up of the new rolling line?*

**Plansee:** The project time plan was strictly adhered to. Mill start-up took place on the very day that had been planned. The start-up phase went well and we are now producing saleable products.

*How would you describe the working relationship with Siemens VAI?*

**Plansee:** This project was characterized by the close cooperation, an open exchange of ideas and information, and detailed discussions among the team members. The right persons were on the project team and the teamwork was excellent. It is ultimately the qualified personnel upon which the success of a project is based.

*What are the future plans and outlook of the Plansee Group?*

**Plansee:** We are an international and growth-oriented company, especially in the Asian and North American markets. We want to further improve our value-added chain, beginning with semi-finished products up to ready-to-use components and parts. Besides having a strong presence as volume supplier in our markets, we want to keep our ability to tailor specialized products and components for particular customer needs. Even in this time of economic crisis, we want to emphasize that we are a reliable partner offering the complete value-added chain to better support and supply our customers. ■

## Profile of the Plansee Group

Powder-metallurgically manufactured semi-finished products, tools and ready-to-install components from high-performance materials of Plansee are thermally, mechanically and chemically resistant to an extraordinary degree. They are used in many high-tech products of everyday life and usually play a decisive role in the functionality of the final product. The products of Plansee are further processed in numerous industries. In metal forming, components are used in extrusion press processes (die plates), in foundry technique (forming) or for the manufacture of control elements (semiconductor base plates). On the basis of the technical demands placed by customers on material properties, including high thermal conductivity, high density, electrical conductivity, high melting point and extreme hardness, companies of the Plansee Group develop high-performance and composite materials made from tungsten, molybdenum, chromium, tantalum and niobium as well as their alloys.

The Plansee Group comprises the divisions: Plansee High Performance Materials (HPM); Ceratizit, the hard metal expert specializing in solutions for cutting tools and wear-resistant surfaces; the powder manufacturer Global Tungsten & Powders; and PMG, which focuses on powder-metallurgical components for the automotive industry. With 73 sales and production sites located in 23 countries, the Plansee Group is always in close proximity to its customers. In the fiscal year 2007/08, a turnover of approximately €1.1 billion was achieved.

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