

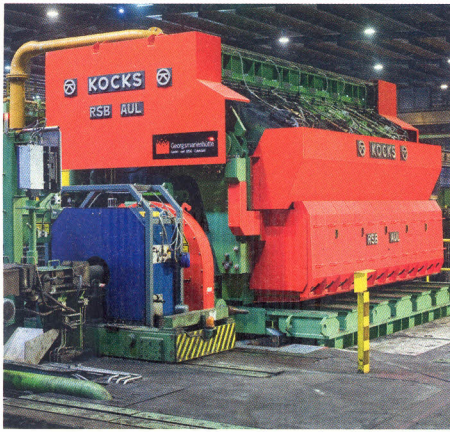
MPT

INTERNATIONAL

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Trend-setting modernization of the SBQ bar mill at Georgsmarienhütte, Germany



Cover photo:
Modernized 3-roll reducing & sizing block (RSB)

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Editorial

A. Hannewald

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Topical themes

K. Golinske, H. Schliephake, S. Schwarz

- 40 **Modernization of the SBQ bar mill at Georgsmarienhütte, Germany**

Georgsmarienhütte GmbH has revamped and extended its 3-roll reducing & sizing block (RSB), originally commissioned in 2001. The mill revamping comprised among others the implementation of a size control system. Additionally, the existing reducing & sizing block has been extended from five to six stand positions. Georgsmarienhütte GmbH is the first rolling mill worldwide to use this trend-setting technology.

Company profile

- 26 **NSSMC on the rocky road to improve the group's competitiveness**

In March 2013, Nippon Steel & Sumitomo Metal Corporation announced a mid-term management plan for a period of three years. Key elements of this plan are the optimization and re-adjustment of the production base in line with global demand and global markets.

- 28 **Ruukki to significantly grow its special steels business**

Rautaruukki is to accelerate its step change into a company specializing in steel construction and special steels and is to reorganize its structure. Focus within the company's largest business area, Ruukki Metals, is shifting increasingly more clearly to special steels. The other business area, Ruukki Construction, is to divide into two new business areas, Ruukki Building Products and Ruukki Building Systems.

Steelmaking

B. Fernandes, C. Klein, H. Rackel, W. Spies, T. Stark

- 30 **High-quality hot strip production from thin slabs at Essar Steel in India**

Essar Steel India extended its production capacity at the Hazira steel works. The pertaining plant technology consists of two 200 t Conarc® furnaces, three twin-ladle furnaces and a CSP® plant. Whereas the latter started operating with two strands, it has meanwhile been extended to become the world's first three-strand CSP® plant. This article describes the plant technology and presents the most important operating results in the commissioning phase.

Modernization

- 38 **Timken brings on line investments at its Ohio steel production sites**

The steel business investments include an open-die in-line forge press at the Faircrest steel plant in Canton, and an intermediate finishing line and a second induction thermal treatment line at the Gambrinus Steel Plant, also in Canton, Ohio/USA.

24 World Steel Association outlook for 2013 – 2014

World Steel Association forecasts that global apparent steel use will increase by 2.9% to 1,454 million t in 2013, following growth of 1.2% in 2012. The key risks to the global economy are expected to have all stabilized considerably in early 2013. A recovery in global steel demand is expected to kick in by the second half of the year, led by the emerging economies. In 2014, it is forecast that world steel demand will grow further by 3.2% and will reach 1,500 million t.

Hot rolling

A. Fontanini, N. Tomba, M. Zuccato, M. Tomba

46 Fast ring-locking system for bar and wire rod finishing blocks

With this new locking system for finishing blocks of bar and wire rod mills, ring changing can be accomplished in less than one minute. Presently, without the system, four to five minutes are required. The new system can be introduced without changing the mill configuration.

P. Bobig, F. Perotti, M. R. Bulfone, S. K. Bhaumik, G. Dal Moro

50 Start-up of the semi-continuous hot strip mill at Baosteel Meishan

In only six months from rolling the first coil, the new hot strip mill achieved a production of 68,000 t per week, which represents more than 80% of the rated capacity. This new hot strip mill has become an important asset for the steelmaker.

Strip processing

56 Improved surface quality of electrical steel strip

ThyssenKrupp Electrical Steel has carried out conversion measures at its Gelsenkirchen/Germany site. Significant improvement in the surface quality of grain-oriented electrical steel has been achieved through annealing process modification.



G. Astengo, L. Correale, T. DeLoia

58 Operation of a high production tinning line with insoluble anode technology

The application of Tenova insoluble anode technology minimizes the amount of sludge produced and hence the loss of tin, increasing both quality and productivity at the same time. The article describes the successful operation of a plant at Jiangsu Sunshine, China.

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