

ISSN 0935-7254

MPT

INTERNATIONAL

6

December
2010



**Measurement technology
for enhancing product
quality and process stability**



**Doubling the capacity of pickling lines by
modernization**



Cover photo:
Measurement technology for enhancing high-end product quality and process stability

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Editorial

A. Hannewald

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Topical themes

C. Antoine, C. Mittag

- 38 **Inline measurement of slabs for optimized reheating furnace control**

Salzgitter Flachstahl, Germany, has recently modernized its wide hot strip mill. In order to charge the new four furnaces as effectively as possible and optimize through-heating of the slabs, a new slab measuring system was installed ahead of the furnaces. The data from each slab measurement help to fully exploit the capacity and efficiency of the modernized plant.

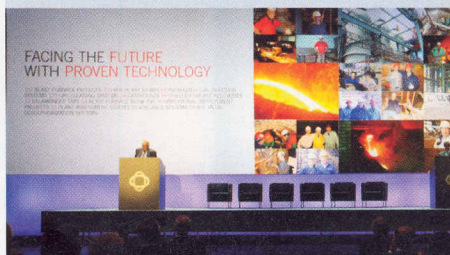
Events

- 20 **MMMM 2011 India exhibition + conference**

MMMM 2011 – Minerals, Metals, Metallurgy and Materials – 8th international exhibition + conference, is scheduled for 11 – 14 February 2011 and will be staged in New Delhi.

- 22 **Danieli Innovaction Meeting 2010**

Partnership and technology innovation had been the basis for the “Partners in Front Running” meeting which was held at the Danieli headquarters in Udine, Italy, in October.



More than 520 steel industry professionals attended the meeting

Company profile

- 26 **Danieli faces the challenge with optimism**

Compared to the previous financial year, the Danieli Group’s revenues are down 20% in 2009/2010. However, the group achieved a record net profit of 201 million euros.

Cokemaking

A. Kalinin, R. Campos

- 30 **First heat-recovery coke plant in Brazil**

The facilities erected on an area of 500,000 square meters comprise four coke oven batteries and one thermal electric power plant. The article describes the heat-recovery technology for high quality coke production and its environmental benefits.

Special equipment

D. Ismagilova

- 34 **Maximizing the yield when processing skull and slag to re-capture valuable materials**

During recycling of steel mill slags, approximately half of the efforts are related to internal transports of the material. Swiss company Fractum has developed technologies that enable breaking the material even if it is red hot.

28 Worldsteel short range outlook for 2010 - 2011

World Steel Association forecasts that apparent steel use will increase by 13.1% to 1,272 million t in 2010 after contracting by -6.6% in 2009. In 2011, world steel demand is to grow by 5.3% to reach a record 1,340 million t. This positive outlook is due to the economic recovery in the developed economies as well as the continued strong rebound in most emerging economies.

Hot rolling

P. Gaboardi, C. Trevisan, G. Boselli, G. Bavestrelli

42 Safety considerations for the roll shop

Safety considerations can be systematically integrated into the design of the complete roll shop system for a rolling mill. Safety is now considered as a part of the complete system in a roll shop, with the result that system architecture is already compliant with the latest international standards.

Modernization

K. Jürgensmann, H.-G. Hartung, M. Jaenicke, C. Sasse, H. Krenn

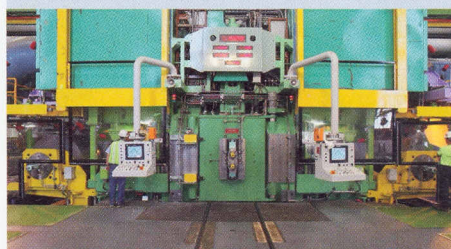
46 Doubling the capacity of pickling lines by modernization

German re-rolling company C. D. Wälzholz subjected its push-pull pickling lines to a major modernization. The project was implemented during three shutdowns of three weeks each. The very restricted floor space conditions posed a special challenge to the project.

Cold rolling

50 Mill launched at ThyssenKrupp Stainless USA

ThyssenKrupp started up its new stainless steel mill in the USA erected on a greenfield site. The 1,600 mm wide cold rolled stainless steel strip makes the plant unique in the USA. Construction of the other units of the stainless steel works is either planned or in progress.



The stainless steel production site started operation mid September

Surface treatment

U. Hintermeier, J. Walek

52 Fast jacking system for zinc pots to minimize CGL downtime

Pfaff-silberblau has developed a reliable and precise changeover system for switching melting pots at galvanizing lines. It enables to switch the line to a different type of coating alloy without causing long production delays.

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