

Cover photo:

The JCOE® process has established itself as an economically highly attractive technology for the production of top quality large-diameter pipes

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INTERNATIONAL

Editorial

A. Hannewald

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Topical themes

Interview

- 28 Strong interest in state-of-the-art tube making technologies from markets worldwide

During the last few years SMS Meer has launched with great success new technologies on the tube and pipe making markets. MPT International interviewed Dr. Joachim Schönbeck, President of SMS Meer, about the benefits for the plant operator. The integration of the Eumuco brand has given the company a more distinct structure also in the forging technology segment. SMS Meer has more than 1,700 employees and a business volume of about 1 billion Euros.

Steelmaking

W. Kunze

- 30 Vacuum pump manufacturer goes it alone

In May 2007 Linde split up the BOC Group and sold Edwards on to CCPM Capital Advisors. Edwards produces vacuum degassing pumps for metallurgical applications, plus integrated manufacturing solutions for the semiconductor and pharmaceutical sectors, as well as for general laboratory and R&D applications.

Hot rolling

M. Baues, R. Oklitz

- 32 Modernization of four-strand rod mill at Saarstahl

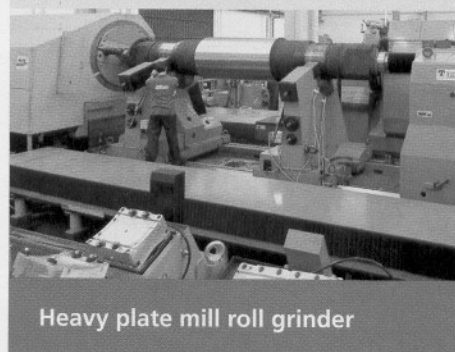
At Saarstahl, Germany, a high-capacity rod mill recently underwent a comprehensive modernization programme. The upgrading basically consisted of separating the existing four-strand intermediate mill into four individual and independent strands and replacing the drive systems. By these measures both the productivity of the mill and the quality of the finished products were considerably improved.

Special equipment

P. Gaboardi

- 36 The challenge of service and innovation for roll shops

Over the last two years, Pomini Tenova has delivered an average of one roll grinding machine per week. This excellent result means a doubling of the productivity of three years ago, with substantially the same number of employees.



Heavy plate mill roll grinder

Heat treatment

- 44 Stable strip tension in a continuous annealing line

Quality improvements have been achieved with stable strip tension in the furnace section of a continuous annealing and processing line at ArcelorMittal Gent (Sidmar), Belgium. According to the plant managers, the large pillow-block load cells have performed markedly better than customized strain gauge used before.

D. Schmidt, R. Dehmel, G. Horn

38 Advanced cooling technologies for high-strength plate production

The production of high-strength steel grades is a major trend in the heavy plate market. In particular plate for shipbuilding and pipe grades are high-volume products in this sector. The production of high-strength plate has implications for all areas of a plate mill. The cooling section remains the main metallurgical tool in this process. In recent years, substantial progress has been made especially in this field.

Automation

T. Heimke

48 Support center provides fast and competent service for plant operators

Production plants are in operation over several decades. If one component fails, its replacement can become difficult. The new service concept provided by the "Metals and Mining Service & Support Center" (MSC) of Siemens VAI offers plant operators adequate support ranging from a round-the-clock telephone hot line/ help desk through to preventive replacement of critical production components.

A. Behrens, M. Hanisch

56 Detailed planning of plant configurations increases investment security

It is often only after complex investments have been made that it is realized that minor or major insufficiencies of the installed equipment cost money every day. This can be avoided by simulation-supported detailed planning of the future plant configuration.

Quality management

F. Lücking

60 Future prospects for integrating automated surface inspection systems

After a decade of development, surface inspection is now a standard tool in flat steel production. The data are now used to optimize quality management for entire plants. This article discusses user experiences with an emphasis on process chain improvements.

Surface treatment

G. Weigner, J. Rockstdt

68 Wringer rolls increase productivity in stainless steel production

Wringer rolls with a covering of special synthetic fibres have proved highly successful in the Benrath works of ThyssenKrupp Nirosta GmbH. These rolls achieve optimal results and excellent surface quality even with thicker gauge strip.



JVM rolls absorb liquids like a sponge

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