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MPT

INTERNATIONAL

Editorial

A. Hannewald

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Topical themes

M. Pozzi, J. Maiolo, V. Scipoloi, D. Masoero, N. Veneri

60 Operating results of the EAF optimization system at Riva Verona

Two Goodfellow EFSOP® systems were installed and commissioned at the Verona meltshop of Riva Acciaio S.p.A. Process analysis of the furnace operation commenced immediately after installation and commissioning. Ultimately process optimization included changes to the carbon/oxygen and methane practice, fume system adjustments, electrical practice adjustments and closed-loop control of oxygen, methane and injected carbon.

Steelmaking

R. Sellan, M. Fabbro, P. Burin

52 The 300 t EAF meltshop at the new Iskenderun minimill complex

MKK-Atakas is building a new minimill and cold mill complex in Iskenderun (Turkey). Its centrepiece will be an Ultra High Power “jumbo-size” AC EAF, with a rated capacity of 300 t of liquid steel.

M. Bradley

70 Overview of tundish dry vibe technology

Although originally designed in the late 1980's as an alternative to pre-formed refractory boards and wet spray systems it is only more recently that tundish dry vibe materials have found wider acceptance on a world wide basis.

Special equipment

H. Sadrpour, Ok-Soo Oh

74 Processing of electric arc furnace slags using the atomizing technology

Processing EAF slags by traditional methods such as crushing and grinding is a costly procedure. The new technology of molten slag atomizing eliminates all pollution issues and produces multi-applicable products.

Secondary metallurgy

R. Robey, C. Priday

80 The growth and use of RH vacuum treatment in India

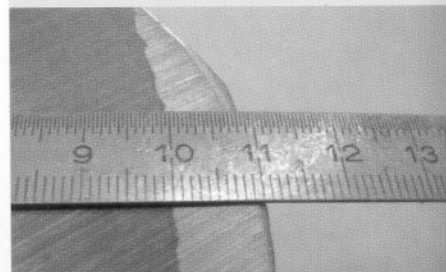
With the current round of projects, the capacity for RH vacuum treatment in India will grow tenfold to 22.6 million t by 2010. This rise is in part due to the demand from the Indian Railways that rails are made only from steel degassed in an RH degasser, and higher demand for ULC steels from automotive manufacturers.

Continuous casting

F. Ederle

90 Improved build-up welding technology enables higher life time of strand guiding rolls

A new patented one-layer welding procedure with metal powder additions sets a new standard in wear-resistant coating technology for continuous casting strand guide rolls.



The very uniform layer improves wear-resistance

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44 Andritz group continues profitable growth

46 Novolipetsk Steel advances phase 2 of its technical upgrade programme

50 Vale rides the wind of growth

Hot rolling

V. Schwich, J. Maierl,
A. Angerbauer, B. Haring

92 Leading-edge technology at the new hot strip mill of ArcelorMittal Polands

In June 2007 the first coil was produced at the new hot strip mill of the ArcelorMittal Group in Cracow, Poland. It is the first completely new plant of this kind in Europe in more than 10 years. With a maximum strip width of 2,100 mm, this hot strip mill is one of the widest of its kind in Europe.

Automation

D. Sanchez

98 High-speed data acquisition system speeds up commissioning of rolling mills

The IBA measurement and diagnosis system is used to assist in commissioning rolling mills. It helps minimize production downtimes during commissioning and afterwards. Maintenance is supported as the system predicts equipment failures and assists in developing suitable preventive maintenance programmes.

Cold rolling

G. Barten

102 Specialists in non-ferrous rolling mill technology

Not only with hard work but also with strong identification have the many generations of family-owners and employees built up the firm Achenbach Buschhütten into what it is today, an exceptional brand in the market of non-ferrous rolling mill engineering.



Tailor-made rolling mill equipment for non-ferrous metals

Surface treatment

A. Heimes-Scheller

106 Colour trends in coil coatings

More daring colours: the standard grey coating now seems to be becoming history in architecture too. With a variety of colours and special effects, commercial buildings are now acquiring more individuality. Cutting-edge technologies and processes allow it to implement in a masterly fashion even quite extravagant design ideas for metal facades.