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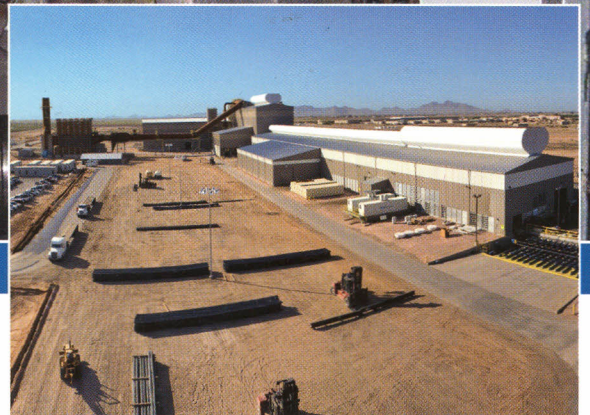
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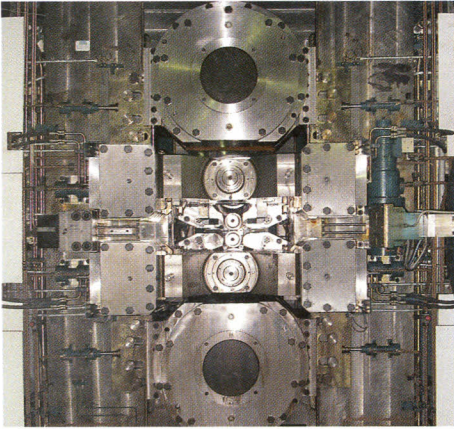
3

June
2010

S6-high stand for in-line and tandem application



New CMC micro-mill in Mesa, Arizona, USA



Cover photo:

Sundwig GmbH – a member company of Andritz Metals

Contact: www.andritz.com/metals

E-mail: sundwig_welcome@andritz.com

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Editorial

A. Hannewald

- 1 Sustainable downstream production

Columns

- 6 International industry news
- 17 Events
- 52 Technical innovations
- 59 Cartoon
- 60 Literature service
- 62 In the next issue
- 62 Imprint

Topical themes

St. Willems

34 S6-high stand for in-line and tandem application

Stainless steel processing lines, such as annealing and pickling lines, are increasingly combined with one or more rolling stands upstream the process section. It makes a separate reducing line superfluous and delivers cold rolled material in one single step. Such lines can be used for hot and cold rolled materials. However, special measures have to be taken to cope with the specifics of the hot rolled material in an annealing and pickling line.

Cokemaking

18 Battery modernization at Saar coke works, Germany

Around 220 million euro have been invested for a modernization project at central coke works Saar (ZKS) in Germany. Featuring fifty coke ovens, the new battery has been equipped with ultra-modern environmental protection technology. Completion of the new battery B3 is to be followed by the refurbishing of one of the other existing coke-oven batteries.

Forging

20 Open-die forging of stainless steel

In march 2010, stainless steel manufacturer Buderus Edelstahl publicly presented its new 80/100 MN open-die forging press in Wetzlar, Germany. Centring on the new forging press Buderus Edelstahl is shaping its technical development, and expanding its position in important core markets. The forging press is to be operated together with a new 2.5 MNm manipulator supplied.

Company profile

C. Travaglini, E. Cavinato, P. Losso

22 The house of the world's longest billet

Commercial Metals Co. has commissioned a new micro-mill in Mesa, Arizona/USA. The new steel complex, the first of its kind worldwide, is based on a highly competitive concept designed to serve a regional market, focusing on a specific product range and making extensive use of local scrap supply.



New micro-mill of CMC Steel Arizona

Special equipment

Yam-Chew Oh

26 Lubricants steeled for Chinese growth

With six lubricant blending plants in mainland China and Hong Kong, Shell Lubricants continues to increase its presence in the country to offer state-of-the-art lubrication solutions which help steel operators to reduce costs and increase productivity.

World Steel Association

16 Short range outlook for the global steel industry 2010 – 2011

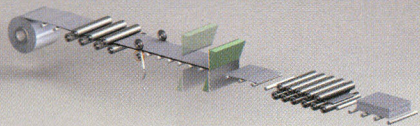
World Steel Association forecasts that apparent steel use will increase by 10.7% to 1,241 million t in 2010. With these projections, world steel demand in 2010 will exceed pre-crisis levels of 2007. In 2011, it is forecast that world steel demand will grow by 5.3% to reach a historical high of 1,306 million t. The resilience of the emerging economies, especially China, has been the critical factor enabling the earlier than expected recovery of world steel demand.

Hot rolling

H.-G. Hartung, M. Jaenecke,
C. Sasse

30 Shearing line for more efficient production of plates with low inherent stresses

The advanced X-Pro® shearing line for heavy-gauge strip offers a cost-efficient alternative to the conventional production of heavy plates. Using hot rolled coils as input stock, this shearing line produces up to 25.4 mm thick steel plates made of high-strength steel.



Heavy shearing line

Heat treatment

D. Ghira, M. Valenza

38 Premix burner panel in vertical annealing lines

Contrary to an all-radiant tube furnace, the free flame solution considerably reduces investment costs without compromising final product quality. Modern technology provides a safe and reliable system capable of controlling the free flame section without damaging strip surface quality.

Surface treatment

S. Martines, P. Curletto, M. Negri,
E. Micek, A. Bufalini, A. Segala

40 Upgrade, modernization and relocation of a stainless steel annealing and pickling line

At ThyssenKrupp Stainless Europe, a combined annealing and pickling line was transferred from Turin to the Terni Works in northern Italy. The new machines and equipment and the revamping activities provided a variety of improvements.

K. Keiji, N. Yoshifumi,
Chen Shenghe, Wang Wen

46 Sludge reduction at the new electrolytic tinning line of Baosteel, China

The Chinese steel producer Baosteel simultaneously erected two new strip processing lines. By advancing the insoluble anode system a very low tin loss of only 3.2% was achieved in commercial production.

K. Baker

50 Oxidiser reduces carbon footprint of a colour coating line

Corus Shotton works, UK, installed a regenerative thermal oxidiser which destroys the harmful solvents evaporated in the colour coating and drying processes. With enough solvent the oxidiser requires no additional gas. Instead the oxidiser recovers over 85% of the energy required.

Advertisers' index

ABB AB	33
Air Systems Limited	56
Andritz Actiengesellschaft	29
Association for Iron & Steel Technology	57
Aumund Fördertechnik GmbH	13
Badische Stahl-Engineering GmbH	19
Carl Bechem GmbH	28
Danieli Automation Spa	49
Danieli S.P.A.	4,5
Hannover Messe Ankiros Fuarcilik A.S.	52
Holtmann Fahrzeug- und Maschinenbau GmbH	56
hpl-Neugnadenfelder Maschinenfabrik GmbH	25
SV Impianti srl	21
Intensiv-Filter GmbH & Co. KG	11
INTECO special melting technologies GmbH	31
KAMAG Transporttechnik GmbH & Co. KG	7
Maschinenfabrik Köppern GmbH & Co.KG	55
Reed Exhibitions (Deutschland) GmbH	37
SGL CARBON GmbH	O.B.C.
SMS Concast AG	51
SMS Siemag AG	I.F.C.
Sundwig GmbH	29
Tenova SpA	15
Verlag Stahleisen GmbH	I.B.C.
PAUL WURTH S.A.	9,10
Z & J Technologies GmbH	43,44
Zumbach Electronic AG	17