

ISSN 0935-7254

MPT

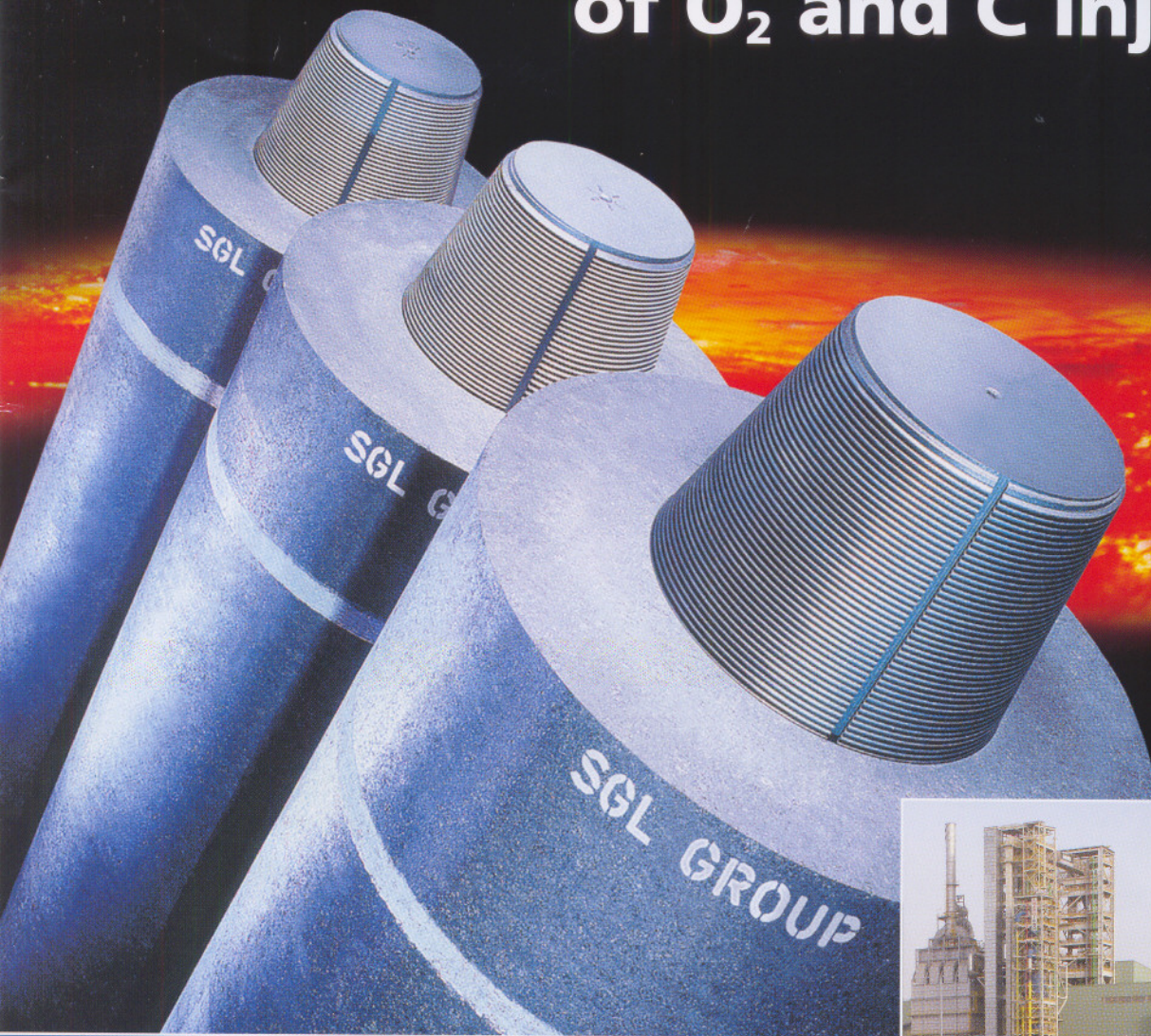
INTERNATIONAL

4

September
2009

INTI-Extensión y Desarrollo
División Bibliotecas
0684
-6 NOV 2009

Reduction in energy consumption through optimization of O₂ and C injection



Emirates Steel starts billet production



Cover photo:
High-performance graphite electrodes
from SGL Group - The Carbon Company

Contact: www.sglgroup.com
E-mail: info-ge@sglcarbon.de

MPT

INTERNATIONAL

Editorial

A. Hannewald

- 3 Light at the end of the tunnel?

Columns

- 8 International industry news
- 18 Metal-Expo, Moscow
- 52 Technical innovations
- 61 Cartoon
- 62 Literature service
- 64 In the next issue / Imprint

Topical themes

A. Wyatt, H. Fuchs, D. Kundrat, H. Schaefer

- 30 Reduction in energy consumption through optimization of oxygen and carbon injection

Most EAF steel shops are not truly optimized in their methods and procedures for the injection of oxygen and carbon. Steel shops are profitably producing excellent quality steel but with many opportunities for improving their cost situation.

- 38 Interview with Hagen Fuchs und Klaus Unterharnscheidt, SGL

Company profiles

- 24 Emirates Steel starts billet production

Strategically located in the Industrial City of Abu Dhabi, just 35 kilometres away from the heart of the city, Emirates Steel Industries is now the only integrated steel plant in the UAE, utilizing the latest rolling mill technology to produce reinforcing bar and wire rod.



- 26 Siemens VAI focuses on growth markets

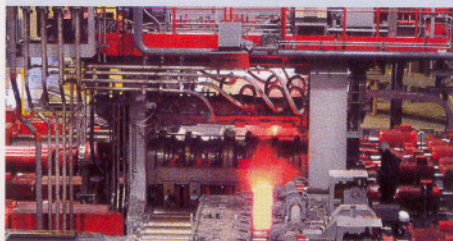
Siemens VAI Metal Technologies is aiming to increase service business through utilization of the global Siemens network and, in technological terms, intends to integrate previously separate aspects of manufacturing in order to create all-round production processes. This will generate new ways of improving the cost situation of metallurgical companies.

Hot rolling - Automation

L. Maestrutti, L. Gori

- 40 Rolling technology for medium and heavy section mills

Continuous efforts in research and development have made it possible to introduce significant innovations in the production of structural steel. Innovative operating processes and equipment such as the Profile Sizing Process (PSP) and the Stand Core Concept (SCC) super heavy-duty stands are available today. They all follow the same objectives: superior finished products, higher productivity and efficiency, and lower production costs.



Break down mill in operation

Advertisers' index

ABB AB	53
AMI GE	9
Arabian German for Exhibition Ltd.	56
Automazioni Industriali Capitano srl	55
CMI UVK GmbH	43
Danieli S.P.A.	6,7
Danieli Automation Spa	25
EUBA Antriebstechnik Eller GmbH	58
GeGa Lotz GmbH	15
IMPAC Infrared GmbH	54
IMS Messsysteme GmbH	13,14
INTECO special melting technologies GmbH	29
Intertech Corporation	56
JP Steel Plantech Co.	O.B.C.
Maschinenfabrik Köppern GmbH & Co.KG	17
Messe Düsseldorf GmbH	57
Plakoma GmbH	19
Reinguss GmbH	52
Schalken Eisenhütte Maschinenfabrik GmbH	11
SMS Meer GmbH	33
SMS Siemag AG	I.F.C.,1
Steel Academy	58
Stein Industrie-Anlagen	37
Stopinc AG	49,50
Tenova SpA	2
Tschan GmbH	43
Dr. D. Wehrhahn	43
PAUL WURTH S.A.	35,36
Z & J Technologies GmbH	21
Zumbach Electronic AG	21
Zwick GmbH & Co.	54

20 SMS group consolidates after record business year in 2008

Global recession causes downturn in orders in current year 2009. High orders in hand secure capacity utilization for the group up to 2010. SMS group continues long-term investments in technical development and manufacturing locations to strengthen competitiveness.

22 Interview with Dr. Heinrich Weiss, Chairman & CEO of the SMS group

Special equipment

G. Boselli, D. Quaglia, E. Trenti,
M. Cozzi

44 Automatic handling of work rolls with chocks

There are many reasons why flat product rolling mills prefer to leave the chocks on rolls during grinding. In the past there were many barriers to doing this. The new automatic loader that Pomini Tenova designed and manufactured for Jindal JSW, India, removes one more barrier and opens this option to a larger group of users. The innovative device was designed to handle roll and chock assemblies up to 25 tonnes while rotating the chocks into the desired orientation for the next processing step. Total cycle times are reduced by a safe efficient machine.



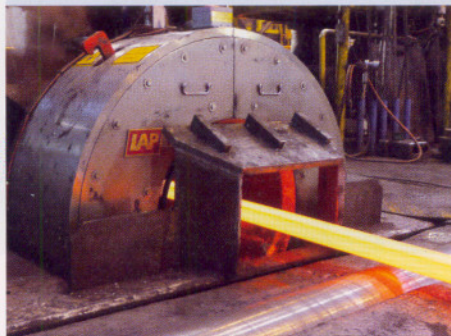
Example of a manual roll shop

Quality assurance

E. Knittelfelder, P. Markiewicz,
T. Surholt

48 High dimensional accuracy in long product rolling through laser-based light section system

Böhler Edelstahl GmbH & Co KG has installed a ProfileCheck system from LAP in the blooming mill of its Kapfenberg works. This new technology provides inline measurements of the complete cross sectional profile of the rolling stock. The system enables inline control of dimensions and immediate intervention in the event of deviations. Through installation of this system Böhler has further optimized its production process and can now supply products of an even higher guaranteed dimensional accuracy.



A robust housing protects the system