**Metallurgical Plant and Technology** 

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10 years PQF® technology: international symposium on tube and pipe production technology

### **Editorial**

#### 3 Challenges ahead

To optimize efficiency, flexibility and operational cost is one task wich the steel industry is tackling this year

#### **Events**

#### 24 Symposium on tube and pipe production technology

Celebrating the 10th anniversary of the PQF\* technology, SMS Meer hosted an international symposium in Mönchengladbach, Germany, in September 2013



26 Analysis of scrap yard layouts to optimize efficiency, flexibility and operational cost

Production figures and operational costs of minimills highly depend on the scrap storage policy



Cover photo 16" PQF® seamless tube plant a VSB Vallourec & Sumitomo, Braz Contact: www.sms-meer.coi E-mail: serviceline24@sms-meer.coi

## **Innovation**

# 34 Jet process converters to be operated even without hot metal charge

Siemens has developed a bottom-blowing converter that makes it possible to blow in oxygen, lime and coal through bottom tuyeres

## **Steelmaking**

# 36 Lifting systems for RH-type vacuum degassing plants

For dipping the snorkels into the heat, various type of lifting equipment have been developed to match the request for short cycle times and highly efficient vacuum treatment

## **Modernization**

# 48 Successful start-up of the new EAF at Ferriere Nord, Italy

In order to improve the melting process and optimize maintenance operations, the Italian steelmaker has replaced the existing EAF within only 38 days

# 54 ThyssenKrupp restarts hot strip mill No. 1 after major upgrade

Following more than two years of work and 240 mi lion euros investment, the upgraded plant is now bac in full operation

## **Professional development**

#### 56 TECademy provides professional trainings for plant operators

SMS Siemag has founded an international seminar and training academy for the global metallurgical and rolling mill industry









# **Columns**

8 International industry news 68 Literature service

58 Technical innovations 70 In the next issue

67 Cartoon 70 Imprint

# Advertisers' index

ABB AB	66	G.P.S. Engineering Srl	D.B.C.	Metal Expo, JSC	71
Association for Iron & Steel Technology	7 14	Guild International Inc.	47	Morgardshammar AB	53
Aumund Fördertechnik GmbH	59	KOCH H&K Industrieanlagen GmbH	22	Pert srl	29
Badische Stahl-Engineering GmbH	39	HEITRONICS Infrarot Messtechnik Gml	oH 17	Plakoma GmbH	45
C.M.P. Officine Meccaniche Srl	63	hpl-Neugnadenfelder Maschinenfabr	ik	Siemens VAI Metals Technologies Gn	nbH 43
CIEC China International		GmbH	64	Siempelkamp Maschinen -und	
Exhibition Corporation	55	Friedrich Kocks GmbH & Co. KG	9	Anlagenbau GmbH & Co.KG	35
Danieli Automation Spa	23	Maschinenfabrik Köppern		SMS Meer GmbH	I.F.C.
Danieli S.P.A.	4, 5	GmbH & Co.KG	56	ThyssenKrupp Industrial	
Fives DMS	25	LAP GmbH	11	Solutions GmbH	41
Edwards	12	Lechler GmbH	57	TMEIC - Toshiba Mitsubishi	13
Evertz Hydrotechnik GmbH & Co. KG	55	Loesche GmbH	31	PAUL WURTH S.A.	19, 20
Fabris InC.	51	LOI Thermprocess GmbH	27	Z & J Technologies GmbH	61, 62
FC Technik AG	10	Messe Düsseldorf GmbH 21, 33, 58,	60, 65	Zumbach Electronic AG	15