

"Tetsu-to-Hagané" Vol. 76 No. 9, September, 1990

Contents

Special Lecture

- The Present Status and Future Outlook of Refractories as a Ceramic Material M. KIMURA...1403

Technical Review

- Elasto-plastic Models for Evaluating r Value of Clad Sheets and Dual-Phase Steels..... T. SAKAKI...1414

Commentaries

- Electrochemistry of Semiconductors N. SATO...1423
Microtribology and Its Measuring Techniques R. KANEKO...1437
New Disinfection Method by Electrodialysis Using Ion-exchange Membranes T. SATO and H. OHYA...1443
Corrosion and Protection of Reinforcing Steel in Concrete T. MIYAGAWA...1449

Technical Papers and Technical Reports

High Productivity Operation in a Large Blast Furnace

- R. NAKAJIMA, S. KISHIMOTO, B. IINO, H. HOTTA, H. ITO and S. FURUYA...1458
Circumferential Balance Control in Blast Furnace by Hot Blast Control Valves

- R. NAKAJIMA, S. KISHIMOTO, H. HOTTA, K. ISHII, R. KIMURA and S. YAMAMOTO...1466
Evaluation of Gas Temperature by Using Vibrational-rotational Spectrum of Carbon Monoxide

- M. MAEDA, M. KATSUYAMA and M. SASABE...1474
Dephosphorization and Decarburization of High Carbon Iron Melts by Sodium Carbonate

- Y. TAKEBAYASHI, N. SHINOZAKI, K. MORI and Y. KAWAI...1480
Interfacial Oxygen Potential in Phosphorus Reaction between Iron Oxide Containing Slag and Molten

- Iron of High Carbon Concentration P. WEI, M. OHYA, M. HIRASAWA, M. SANO and K. MORI...1488
Behavior at Under-film Corrosion Tips of Zn-Fe Alloy Coated Steel Sheets

- K. HAYASHI, Y. ITÔ, C. KATÔ and Y. MIYOSHI...1496
Influence of Stress on Low Temperature Sensitization of SUS304 Stainless Steel

- K. KONNO and H. CHIBA...1504
Effect of Quenching from γ/α Dual-Phase on Mechanical Properties of Controlled-rolled

- Low-carbon Boron-steels Y. FUJISHIRO, T. HASHIMOTO and H. OHTANI...1512
Effect of Inter-pass Time in Rough Rolling Process on the Orientation Distribution in 17%Cr

- Stainless Steel Sheet J. HARASE, K. OHTA, R. SHIMIZU and T. TAKESHITA...1520
Effect of Cooling Temperature in Hot Rolling on the Mechanical Properties in 17%Cr Stainless

- Steel Sheet J. HARASE and T. TAKESHITA...1528
Metallurgical Study to Develop a Production Technique with a Lowered Hot-coiling Temperature for

- Cold-rolled, Deep-drawable Continuous-annealed Aluminum Killed Sheet Steels

- K. USHIODA, K. KOYAMA and M. TAKAHASHI...1536
Effect of W/Ta Ratio on Hot Corrosion of Nickel-base Superalloy Single Crystals in

- Combustion Gas Stream A. ISHIDA, A. TAKEI and M. YAMAZAKI...1544
Effect of Cathodic Protection on Fretting Fatigue of High Strength Steels in Seawater

- K. NAKAZAWA, M. SUMITA and N. MARUYAMA...1552
Development of the System for Automatic Crystallographic Orientation Analysis by Electron

- Channelling Pattern..... S. FUNAKI, M. TANINO, T. KOBAYASHI and N. NANGOH...1559

Letters

Proposals for Innovation of Attraction of Manufacturing Industry.....	M. KIUCHI...1567
Research Project on the Phase Diagrams in the Royal Institute of Technology	H. OHTANI...1570
On Receiving the Tawara Prize.....	K. SANO...1572

Report

The 119th ISIJ Meeting SYMPOSIA	1574
---------------------------------------	------

The Editor's Postscript	1586	Notification from the Information Center of	
Notice to Members	N 245	ISIJ.....	N 258
		Proceedings to the Institute	N 259

鉄と鋼 定価 2,884 円（本体 2,800 円、消費税 84 円）

Tetsu-to-Hagané Price : ¥2,884.—(including Consumption Tax ¥84.—)

(Only for export, ¥2,800.—excluding Consumption Tax ¥84.—)

編集委員会

委員長 南雲 道彦

編集運営委員会

石井 邦宜	及川 洪	大河内春乃	大谷 泰夫	小野 陽一
尾上 俊雄	菊池 實	権藤 永	雀部 実	佐野 正道
新宮 秀夫	中岡 一秀	中西 恭二	新居 和嘉	垣生 泰弘
林 央	溝口 庄三	吉田 豊信		

和文会誌分科会

主査 雀部 実	幹事 大河内春乃			
委員 小豆島 明	井口 敦孝	石川 圭介	石黒 徹	伊藤 邦夫
岩田 英夫	岩永 祐治	遠藤 孝雄	大沢 紘一	大中 逸雄
岡本健太郎	片山 裕之	金子 智	河井 良彦	川上 正博
栗林 一彦	齊藤 良行	鷺山 勝	清水 正賢	高嶋 修嗣
高城 重彰	高橋 政司	田口 整司	田中 紘一	田村 至
友田 陽	長谷川守弘	肥田 行博	藤井 徹也	藤田 米章
古川 武	牧 正志	増田 一郎	松尾 孝	松尾 亨
三吉 康彦	森戸 延行	八木順一郎	安中 弘行	鍾田 征雄
若野 茂				

© COPYRIGHT 1990 社団法人 日本鉄鋼協会

本書に掲載されている記事の無断転載ならびに無断コピーを禁じます。

This publication, or any part thereof, may not be reproduced in any form
without the written permission of the ISIJ.