

Contents

Special Lecture

Recent Trends in Japanese Refractories Technology .....T. HAYASHI... 841

Technical Review

Morphology and Substructure of Lath Martensite in Steels .....T. MAKI and I. TAMURA... 852  
Transition of Methods for Determination of Sulphur in Iron and Steel .....T. OTSUKI... 867

Commentaries

Current Steels for Nuclear Pressure Vessels .....S. ONODERA... 880  
Estimation of Failure Time and Reliability of Materials against Corrosion.....T. SHIBATA... 891  
Reviews of On-line Measurements in Iron and Steelmaking Processes .....Y. YOSHITANI... 900  
Fracture Toughness of Ice .....N. URABE... 908

Technical Papers

Method of Dry Granulation and Solidification of Molten Blast Furnace Slag  
.....M. YOSHINAGA, K. FUJII, T. SHIGEMATSU, and T. NAKATA... 917  
A Calorimetric Study of Heats of Mixing of Liquid Iron Alloys  
.....Y. IGUCHI, Y. TOZAKI, M. KAKIZAKI, T. FUWA, and S. BAN-YA... 925  
Activity of Silicon in Solid Iron .....T. FUJISAWA, Y. ISHINO, A. KUBO, and H. SAKAO... 933  
Effects of Vanadium, Chromium, Molybdenum, and Wolfram on the Activity  
of Silicon in Solid Iron.....T. FUJISAWA, S. KIMURA, and H. SAKAO... 940  
Refining of Solidification Structures of Continuously Cast Type 430  
Stainless Steel Slabs by Electromagnetic Stirring  
.....Y. ITOH, T. OKAJIMA, H. MAEDE, and K. TASHIRO... 946  
Estimation of the Formation of A-segregation in Steel Ingot in  
Terms of the Chemical Composition of Steel  
.....O. HAIDA, S. OKANO, T. EMI, and G. KASAI... 954  
Analysis of Cooling Effect of Laminar Water Flow for Steel Plate at  
High Temperature.....N. HATTA, J. KOKADO, and K. HANASAKI... 959  
The Effect of Interrupted Accelerated Cooling after Controlled Rolling  
on the Mechanical Properties of the Steels.....C. OOUCHI, T. OOKITA, and S. YAMAMOTO... 969  
Crack Arrest Toughness of Structural Steels Evaluated by Compact Test  
..... Y. NAKANO and M. TANAKA... 979

Effects of Cr, Mo, W, Nb, Ta, Ti, Zr and Hf on High Temperature Creep  
 Properties of Carbon Free 25Cr-35Ni Steel  
 .....Y. KONDO, T. MATSUO, the late T. SHINODA, and R. TANAKA... 987

Hot Corrosion Behavior of Heat Resisting Alloys  
 ..... M. YOSHIBA, O. MIYAGAWA, and D. FUJISHIRO... 996

Microstructure and Toughness of the Welded Heat Affected Zone in  
 5%Ni-0.5%Mo Steels .....S. HORIBE, M. SUMITA, and I. UCHIYAMA...1006

**Discussion**.....1015

**New Technics**

Development and Application of the Unmanned Operation Technology  
 of the Hot Strip Mill .....S. FUJII, T. TSUKUI, S. WATANABE, and Y. NOMA...1016

Development of New Seamless Rolling Method by Industrializing Press  
 Roll Piercing Method.....T. GÔDA...1021

**Technical Topic**

History and Its Characteristics of Weldable High Tensile Structural Steels  
 in Japan .....K. SHIBATA...1026

**Letters**

Iron and Steel Industry in Southwestern China .....T. SOMA...1030

International Symposium on Atmospheric Corrosion .....T. FUKUSHIMA...1033

Abstracts.....1035, Columns .....1029, 1032, 1034, 1040,  
 Notice to Members .....N129, Proceedings of the Institute .....N144

**編 集 委 員 会**

委員 長	田中 良平									
運営委員 会										
委 員	安藤 卓雄	大井 浩	大森 康男	加藤 栄一	邦武 立郎					
	郡司 好喜	小指 軍夫	佐藤 忠雄	佐野 信雄	相馬 胤和					
	高橋 忠義	中村 正久	萬谷 志郎	細井 祐三	渡辺 敏					
和文会誌分科会										
主 査	田中 良平	幹事	佐野 信雄							
委 員	朝野秀次郎	池田 隆果	井上 正文	入江 敏夫	岩永 寛					
	江見 俊彦	大西 敬三	大森 靖也	加藤 健三	金尾 正雄					
	川合 保治	川上 公成	川口 忠雄	木原 諄二	國岡 計夫					
	郡司 好喜	佐久間 健人	清水 彰	鈴木 朝夫	須藤 正俊					
	相馬 胤和	高橋 忠義	槌谷 暢男	角山 浩三	徳田 昌則					
	中岡 一秀	中村 泰	西田 礼次郎	原 富啓	原 行明					
	萬谷 志郎	古林 英一	牧 正志	松田 福久	水野 博司					
	宮川 大海	森 隆資	森田 善一郎	安田 浩	吉越 英之					

© COPYRIGHT 1981 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.