

Contents

Foreword

Contingency in Research and Development	K. MORI...2155
---	----------------

Commentaries

Progress of RH Refining Process in Japan.....	T. KUWABARA...2157
Nonequilibrium Phase Diagram and Physical Properties of Vapor Quenched Fe Alloys	K. SUMIYAMA and Y. NAKAMURA...2172
High Corrosion Resistant Amorphous Plating	T. WATANABE...2180
Development on Coatings for Gas Turbine	N. IWAMOTO...2187

Report on the Research Committee of ISIJ

Future of Metal Working in Steel Industry	T. KAWANAMI...2197
---	--------------------

Technical Papers and Technical Reports

Tuyere Accretion Growth at Gas Injection into Liquid	S. KATAGIRI, Y. OZAWA, K. MORI and M. SANO...2206
Oxidation-Reduction Equilibria of Manganese in $Mn_2O-CaO-SiO_2-Al_2O_3$ Melts	Y. TAMURA, S. NAKAMURA and N. SANO...2214
Explosive Compaction of Fe-25 Cr-5 Al Heat Resisting Alloy Powders	K. TAKASHIMA, H. TONDA, M. UENO, T. TORAIISHI and M. MIYANO...2219
The Evaluation of the Mechanical Properties of a High-strength Ti-17 Alloy Die-forging	T. MATSUMOTO and T. NISHIMURA...2227
Effects of Kind and Content of Metal Powders Contained in the Paint Film on Weldability and Formability of Weldable Paint Coated Steel Sheets	J. OKA and H. IWAKURA...2235
Effect of the Addition of Al_2O_3 and Al_2O_3-CaO on the Reduction of Dense Wustite with H_2	N. SHIGEMATSU and H. IWAI...2243
Influence of Solution Treatment under Unrecrystallizing Condition for Austenite (Unrecrystallization Solution Treatment) on Martensite Structure of 18%Ni Maraging Steel	K. KURIBAYASHI and R. HORIUCHI...2251
Influence of Solution Treatment under Unrecrystallizing Condition for Austenite (Unrecrystallization Solution Treatment) on Hydrogen Embrittlement of 18%Ni Maraging Steel	A. NOZUE, K. KURIBAYASHI, T. OKUBO and R. HORIUCHI...2259
Effect of Compressive Strain Holding on the Low Cycle Fatigue Strength of $2\frac{1}{4}Cr-1Mo$ Steel at Elevated Temperatures	I. NONAKA, M. KITAGAWA, A. OHOTOMO and Y. WADA...2267
Effect of the Link Shape of Large Chain on Stress Distribution	N. SUZUKI, I. SOYA, H. NITTA and M. KONDOU...2275
Charpy Impact Value of the Flash Welded Zone of High Strength Chain	N. SUZUKI, T. MORI, T. HARADA and H. Ooba...2282
Micro-structure and Mechanical Properties of Induction Heating Quenched and Tempered Spring Steel	K. KAWASAKI, T. CHIBA, N. TAKAOKA and T. YAMAZAKI...2290
Effect of Austenite Grain Size on Mechanical Properties in Spring Steel Austenitized Quenched and Tempered by Induction Heating	K. KAWASAKI, T. CHIBA, H. KOGA and T. YAMAZAKI...2298

Surface Analysis of Steel Products by Angular Distribution Measurement in the XPS

..... T. YAMASHITA and K. TSUNOYAMA...2306

Letters

Hope and Disire for Steel Finishing..... M. KITAYAMA...2314

Impressions during the Stay in U. S. A.—Trends of Research on Titanium Alloys in U. S. A.—
..... H. ONODERA...2321

Reports

The Third International Conference on High Temperature Alloys for Gas

Turbines and Other Applications—COST 50 and COST 501—..... N. YUKAWA...2316

13th International Meeting of ISO/TC 102/SC 2-Iron Ores-Chemical Analysis..... K. TAKIMOTO...2318

Report on Fifth International Conference on Mechanical Behaviour of Materials, ICM-5..... H. IIZUKA...2320

Column2323 Proceedings to the Institute N258

The Editor's Postscript2323 Notification from the Information

Notice to Members N243 Center of ISIJ N260

編 集 委 員 会

委 員 長 鈴木 朝夫

編集運営委員会

阿部 光延	荒木 透	大谷 泰夫	小野 陽一	尾上 俊雄
河部 義邦	岸 輝雄	国岡 計夫	権藤 永	佐久間健人
佐々木 徹	雀部 実	佐野 信雄	新居 和嘉	原 富啓
細井 祐三	牧 正志	榎本 弘毅		

和文会誌分科会

主 査	佐野 信雄	幹事	河部 義邦				
委 員	浅井 滋生	阿部 英夫	綾田 研三	石黒 徹	稲葉 晉一		
	乾 恒夫	岩田 英夫	遠藤 孝雄	大河内春乃	大宝 雄蔵		
	大中 逸雄	大矢 清	片山 裕之	勝亦 正昭	金子 智		
	河井 良彦	川上 正博	木内 学	栗林 一彦	郡司 直樹		
	坂木 庸晃	坂本 登	雀部 実	佐藤 駿	志賀 千晃		
	下村 隆良	城田 良康	神馬 敬	高塚 公郎	高橋 政司		
	田口 整司	田中 紘一	田村 至	辻川 茂男	長谷川守弘		
	肥田 行博	藤井 徹也	松尾 孝	三原 豊	三吉 康彦		
	門馬 義雄	八木順一郎	山口 正治	大和 康二	吉田 勝彦		
	渡辺 征一						

© COPYRIGHT 1987 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.