

"Tetsu-to-Hagané"

Vol. 64 No. 14, December, 1978

Contents

Forword

Steel and Slag	Y. MATSUSHITA...2099
----------------------	----------------------

Technical Papers

Sulfurization of Prereduced Sponge Iron Pellets by COS-CO Gas Mixtures	R. KUWANO and Y. ONO...2101
On the Pre-Treatment of Pig Iron by the Continuous Dephosphorization Furnace	A. FUKUZAWA, R. NAKAGAWA, S. YOSHIMATSU, A. SATO, T. MITSUI, and T. OZAKI...2109
Dissolution and Transport Phenomena of Deoxidizing Elements into Quiescent Molten Iron	T. KUSAKAWA, Y. SHIOHARA, and M. OOHORI...2119
Formation Mechanism of Dendritic and Spherical Alumina Formed When Iron is Deoxidized by Aluminium	T. KUSAKAWA, Y. SHIOHARA, and S. ARAKI...2129
Productions of Ultra Low Nitrogen Ferrochromium and of High Purity Stainless Steel with It	H. KATAYAMA, S. KIMURA, H. KAZIOKA, and M. ITOH...2139
On the Ductility of Steel near the Solidification Temperature	H. FUJII, M. ODA, T. OHASHI, K. KAWAMURA, and K. ASANO...2148
Effect of Nitrogen Content on Recrystallization Textures of Extra-Low-Carbon Steel Sheet	M. TAKAHASHI and A. OKAMOTO...2158
Effect of Nitrogen on Recrystallization Kinetics of Extra-Low-Carbon Steel Sheet.....	M. TAKAHASHI and A. OKAMOTO...2167
Relation between Precipitation Behavior of Mo, V and Nb and Yield Strength in Normalized and Tempered Steel	S. UEDA, M. ISHIKAWA, A. KAMADA, and N. OHASHI...2177
Crack Propagation Rates of SUS 321 Stainless Steel under High-Temperature, Low-Cycle Fatigue Conditions	K. YAMAGUCHI and K. KANAZAWA...2187
Effects of Carbon, Nitrogen and Nickel Content on the Low Temperature Impact Value of in High Manganese Austenitic Steel	M. FUJIKURA and T. KATO...2195
Improvement in Toughness of Large Heat-Input Weld Bond of 60 kg/mm ² Grade High Tensile Strength Steel Plates due to Boron Addition and Low Silicon Content.....	H. OHTANI, S. WATANABE, Y. KAWAGUCHI, and Y. YAMAGUCHI...2205
Formation and Growth Kinetics of Intermediate Phases in Hot Dip Galvanizing	Y. WAKAMATSU and M. ONISHI...2215
Study on CaS-Dispersed Steel Produced by Spray-Dispersion Method	M. HASEGAWA, K. TAKESHITA, J. FUKUMI, and K. SASSA...2224

Technical Report

Determination of Nitrogen in High Carbon Ferrochromium by Graphite Capsule Method	T. KIKUCHI, M. KANAI, K. FURUYA, and S. HAYAKAWA...2234
---	---

Special Recture

Recent Developments of Steelmaking Technology and the Situation of Special Steels in Japan	K. TAKEDA...2239
--	------------------

Technical Review

Present State and Future of Railway Rails.....	R. KURIHARA...2247
--	--------------------

Commentary

Properties of Coal and Metallurgical Coke.....	H. KIMURA...2257
--	------------------

Reports

The Third Germany-Japan Seminar	Y. INOUE...2274
Third International Iron and Steel Congress	2284
International Conference on Basic Oxygen Steelmaking—A New Technology Emerges ?	T. MORI...2290

Discussions	2293
-------------------	------

Report of Discussions of 95th ISIJ Meeting	2294
Abstracts.....	2302, JISTIC News.....2306, Notice to Members.....N187,
Proceedings of the Institute.....	N197

Overseas membership: Annual charges: ¥6000 (incl. postage) Initiation fee: ¥600