



"Tetsu-to-Hagané"

Vol. 66, No. 8, July, 1980

Contents

Foreword

The Inaugural Message from the President K. TAKEDA...1055

Technical Papers

Physical and Low Temperature Reducing Properties of Lime-fluxed Pellets
..... O. TSUCHIYA, K. OHTUKI, T. SUGIYAMA, M. ONODA, and I. FUJITA...1057

Measurement of Carbon and Titanium Solubilities into Molten
Fe-C_{sat}-Ti Alloys
..... M. SUMITO, N. TSUCHIYA, K. OKABE, and K. SANBONGI...1066

Knudsen Cell-Mass Spectrometric Determination of Activities in
Fe-Mo Alloys
..... E. ICHISE, T. MARUO, H. SASHO, Y. UESHIMA, and T. MORI...1075

Model for Formation of Equi-axed Crystal Zone in the Killed Steel Ingots
..... I. KAWAWA, R. IMAI, Y. KUNISADA, and K. TAGUCHI...1084

Refining of Solidification Structures of Type 430 Stainless
Steel by Vibration Method.....Y. ITOH, T. OKAJIMA, and K. TASHIRO...1093

Experimental Method of Stress Simulation of Rolling and Continuously
Cast Slab by Plasticine.....K. CHIJIWA, Y. HATAMURA, and T. SUZUKI...1103

Morphology Changes of Manganese Sulphide Inclusions in the
Manufacturing Process of Grain Oriented 3% Silicon Steel Strip
.....M. KOIZUMI, T. KIKUTI, and S. BANDŌ...1113

Characteristics of MnS Particles in the Unique Processing of Grain
Oriented Silicon Steel from their Cast Slabs
..... M. KOIZUMI, T. KIKUTI, and S. BANDŌ...1123

Effects of P, Sn, As, Sb, Si and Cu on the Formation of Bubbles
by Hydrogen Attack in 2.25 Cr-1Mo SteelT. SAKAI and H. KAJI...1133

On the Machinability of SUS 304L and S-bearing 304L-type Sintered
Stainless Steels.....T. KATO, K. KUSAKA, and T. HISADA...1142

Corrosion Resistance of Welded Joints in Some Duplex Alloys
.....H. NAGANO and M. KOWAKA...1150

Application of Strainrange Partitioning Method to Fatigue-Creep
Interaction in SUS 316 and 1 $\frac{1}{4}$ Cr- $\frac{1}{2}$ Mo Steels
.....K. YAMAGUCHI, and K. KANAZAWA...1160

Stress Relaxations Test on Some Commercial Steels Using the Oding
Ring Method..... T. SHINODA, S. SHIMANUKI, and R. SASAKI...1170

Strength and Toughness of Thermomechanically Treated 350 kgf/mm²
Grade 10Ni-18Co-14Mo Maraging Steel..... S. MUNEKI and Y. KAWABE...1177

Commentary

Material Selection in Offshore ConstructionsY. ARITA and K. KAJIMOTO...1187

Special Lecture

Application of Blast-furnace Slag as Aggregate and Other Materials
for ConcreteM. KOKUBU...1199

Report of the Joint Research Society of ISIJ

Precision and Lower Limit of Determination in the Chemical Analysis
of Iron and SteelH. KISHITAKA...1206

Letter

Mutter of a ReviserO. NISHIKAWA...1215

Abstracts.....1217, Notice to Members.....N179,
Proceeding of the Institute.....N192,