

# "Tetsu-to-Hagané"

Vol. 57 No 3, Mar., 1971

## Contents

### Foreword

- Development and Peninsularity..... *Akira MORISAKI*...463

### Technical Papers

- Study on the Reduction of Magnetite Pellets Containing Anthracite..... *H. REE and M. TATE*...465  
Heat Flux in Plates during Cooling by Water..... *T. SHIRAIWA and S. KOBAYASHI*...485  
On Floating Zone Melting of High Purity Iron..... *Y. TAMURA, T. FUJI, and Y. OHBA*...498  
Effect of Casting Conditions on the Formation of Large Non-Metallic Inclusions in Top-Poured Killed Steel Ingots..... *T. MITSUO, Y. KOIKE, T. HORIGOME, S. SAITO, and Y. KITAMURA*...505  
Effect of Niobium Addition on Austenite Grain Size in Steel..... *Y. OGINO, H. TANIDA, M. KITAURA, and A. ADACHI*...533  
Effect of Vanadium and Boron on High-Temperature Strength  
Heat Resisting Steels of 25%Cr-28%Ni-2%Mo with High Nitrogen..... *R. TANAKA and Y. TOBE*...547  
Precipitation of Aluminium Nitride during Recrystallization of  $\alpha$ -Iron..... *T. OTOTANI, Y. KATAURA, and T. FUKUDA*...566  
The Effect of Tellurium on Properties of Steels..... *K. NARIHIRO, Y. OTOGUCHI, N. MIIDA, K. MIYAGAWA, I. ICHIJIMA, and T. EGASHIRA*...575  
Machinability of Calcium Deoxidized Steel..... *T. SATA, Y. MIYASHITA, K. NISHIKAWA, S. NARA, and T. MIMINO*...589  
Automatic Nondestructive Inspection for Surface Defects of Hot Rolled Round Steel Bars..... *T. SHIRAIWA and T. HIROSHIMA*...601

### Technical Reports

- Hot Corrosion of Some Heat Resisting Alloys by  $V_2O_5-Na_2SO_4-NaCl$  Mixtures..... *K. KUSAKA and K. TSURUMI*...614  
Coulometric Determination of Sulphur in Steel..... *K. MIZUTANI and M. NARITA*...623

### Technical Reviews

- World's Coking Coal and Iron Ore Situation as Seen from Japanese Steel Industry..... *Saburo TANABE*...629  
On Continuous-Continuous Casting of Steel..... *Hirotaro NEMOTO, Takaho KAWABA, Shigeo SOEDA, Diichi SAKAMOTO, and Takayuki KOYANO*...646  
State Analysis of Steel..... *Shigeo WAKAMATSU*...656

- 
- Abstracts..... 673, Library News..... 687, Notices to Members..... N33,  
Proceedings of the Institute..... N40
- 

*Overseas membership: Annual charges: \$ 10.00 (incl. postage) Initiation fee: \$-1.00*