

# “Tetsu-to-Hagané”

Vol. 61, No 6, April, 1975

## Contents

### Foreword

- On the 60th Anniversary of the Founding of the Iron and steel Institute of Japan ..... Tokushichi MISHIMA... 775

### Technical Papers

- The Shrinkage of Burden Materials and Pressure Drop of Gas in Softening and Fusing Zones of Blast Furnace ..... K. ONO, Y. HIDA, A. SHIGEMI, and K. KODAMA... 777  
A Mathematical Model for Blast Furnace Operation with Inclined Layers of Burdens ..... M. KUWABARA and I. MUCHI... 787  
The Influence of Kind of Deoxidizer on Rimming Action ..... K. OKOHIRA, M. IWAMOTO, and H. MORI... 797  
The Effect of Degree of Spheroidization on the Cold Forgeability of Steel ..... T. Inoue, Y OCHIDA, and S. KINOSHITA... 808  
The Production of Cold Rolled Steel Sheet of Extra Deep Drawing Quality by Continuous Annealing Process ..... N. FUKUDA and M. SHIMIZU... 817  
The Influence of Reduction-Ratio in the Hot-Rolling on the Strength and Toughness of Quenched and Tempered Steel ..... S. WATANABE and T. Kunitake... 828  
Delayed Failure Characteristics of Ultra High Strength Steels ..... F. NAKASATO and F. TERASAKI... 841  
Delayed Fracture Characteristics of Tempered Bainitic (B<sub>II</sub>-Type) and Tempered Martensitic Steels ..... F. NAKASATO and F. TERASAKI... 856  
Study on the Formation of Scale Layer on Work Rolls in Hot Rolling ..... Y. SEKIMOTO, M. TANAKA, and T. YOSHIMURA... 869  
Study on the Brittle Fracture Propagation-Arrest Characteristics of Low C-Ni Steel Plates by Tapered Double Cantilever Beam Test ..... S. HASEBE and Y. KAWAGUCHI... 875
- 
- Report of the Joint Society on Iron and Steel Basic Research
- Identification of Solidification Structure of Steel Ingots ..... K. GUNJI and T. Okamoto... 884
- 
- Abstracts.....899, Library News.....905,  
Notice to Members.....N75, Proceedings of the Institute.....N79,  
News of Iron and Steel Standard Samples for Analysis ..... N83

---

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

---

© The Iron and steel Institute of Japan, 1975