

“Tetsu-to-Hagané”

Vol. 58, No 12, Oct. 1972

Contents

Foreword

- Information Processing.....*Mayumi SOMEMO*...1555

Technical Papers

- The Countercurrent Reduction of Iron Ore in a Fluidized Rotary Bed*T. SOMA*...1557
Investigations of the Sintering Process by Applying of Mathematical Simulation*T. HAMADA, T. KOITABASHI, and K. OKABE*...1567
High-Temperature Thermodynamic Properties in Ti-O System*K. SUZUKI and K. SAMBONGI*...1579
A Fundamental Study of Titanium Deoxidation of Steel*K. SUZUKI and K. SAMBONGI*...1594
Kinetics of Decarburization of Liquid Iron by Ar-CO₂ Gas Mixture*H. NOMURA and K. MORI*...1603
Effect of Vanadium and Nitrogen Addition on the Recrystallization of Cold Rolled Low Carbon Steel*T. MATSUOKA, M. TAKAHASHI, and H. SHIRAISHI*...1612
Effect of Nb, Ti, Mo and B on Creep Rupture Strength of 16Cr-10Ni Heat Resisting Steel with Vanadium*R. TANAKA, T. SHINODA, and T. ISHII*...1623
Effect of Carbide Stabilizing Elements Ti, Nb and V on the High Temperature Strength and Microstructural Change of 18%Cr-10%Ni Austenitic Steel*R. TANAKA, T. SHINODA, T. ISHII, T. MIMINO, K. KINOSHITA, and I. MINEGISHI*...1632
Transverse Rupture Strength of the High Speed Steel Produced by Means of Powder Forging*Y. KUDOH and K. MASUDA*...1646
Age Hardening Behaviors of Low Nickel Stainless Steel Containing Aluminum*T. FURUKAWA, S. ONUMA, and R. TANAKA*...1653
Precipitation Hardening of 18%, 20%, and 25% Nickel Maraging Steels*K. SOENO and T. KURODA*...1663
Influence of Carbides and Nitrides on the Recrystallization Behavior in Cold Rolled Steel Sheets*F. TERASAKI and T. KANEKO*...1674
Mechanical Properties of TRIP Steels for Room Temperature Use*T. FUJITA, H. MISAWA, and H. TSUTSUMI*...1693
Conjecture of Salamander Penetration into the Blast Furnace
Hearth Refractories Using Infrared Camera*J. OHNO*...1705

Report

- Estimation of the Japanese Standard Sample of Iron and Steel (JSS) for Instrumental Analysis by Photoelectric Emission Spectrochemical Analysis —Standardization Samples Series A—*K. OKAZAKI and I. KAWASHIMA*...1718

Technical Review

- Solid State Electrochemistry at High Temperature and Chemistry of Iron and Steel Making*Kazuhiro Sylvester GOTO*...1729

-
- Abstracts.....1746, Library News.....1751, Notices to Members.....N195
Proceedings of the Institute.....N205
-

Overseas membership: Annual charges: ¥3600 (incl. postage) Initiation fee: ¥360