

Contents

Fundamentals of High Temperature Processes

- Electromagnetic Migration Force Acting on Two Non-conducting Particles in DC Electromagnetic Force Field/Y. KUBOTA, N. YOSHIKAWA and S. TANIGUCHI 113

Casting and Solidification

- Development of a System to Diagnose and Prevent Internal Cracks in Continuous Casting Taking Account of the Effect of Compression Casting/M. ZEZE, H. MISUMI, S. NAGATA, T. SHIRAI and A. TSUNEOKA 121

Chemical and Physical Analysis

- Determination of Trace Silicon in High Purity Aluminium by Molybdsilicic Acid Blue Spectrophotometry after Fluoride Separation (Technical Report)/H. YAMAGUCHI, S. ITOH, R. HASEGAWA and T. KOBAYASHI 129

Surface Treatment and Corrosion

- High-temperature Oxidation of a Ti-15V-3Cr-3Sn-3Al Alloy in CO₂ Atmosphere
K. KUSABIRAKI, Y. FUKUDA and S. SAJI 132
- Reaction between Solid Iron and Molten Zinc Containing Aluminium
Y. WAKAMATSU, T. NOGUCHI, M. YAMANE and F. NOGUCHI 138

Mechanical Properties

- Stretch-flangeability of High Strength Hot Rolled Steel Sheets with Bainitic-ferrite Microstructure
T. KASHIMA and S. HASHIMOTO 146
- Delayed Fracture Resistance of 1500 MPa Grade Bolts Influenced by Galvanic Corrosion
T. SHIRAGA, T. YOKOTA and N. ISHIKAWA 152