



Contents

Fundamentals of High Temperature Processes

- Effect of Steel Compositions on Wettability between Steel Melt and Oxide Plates 411
T. SUZUKI and T. KOSEKI

Ironmaking

- Effect of Inlet Gas Composition on Dioxins Emission in the Iron Ore Sintering Process 417
M. MATSUMURA, T. KAWAGUCHI and E. KASAI

Casting and Solidification

- Apparent Growth Direction of Primary Dendrites in Chill Zone 427
H. ESAKA, Y. KURODA, K. SHINOZUKA and M. TAMURA
- Grain Selection during Initial Solidification for SUS304 and S45C 432
Y. KURODA, H. ESAKA, K. SHINOZUKA and M. TAMURA
- The Improvement of Surface Cracks on Leaded Free-cutting Steel Bloom 439
Y. OHBA, I. TAKASU, S. KITADE and H. SHIMOGUCHI

Chemical and Physical Analysis

- Precise Estimation of Emission Intensity of Alloyed Elements in Steel by Using Internal Standard Line
in Glow Discharge Optical Emission Spectrometry (Technical Report) 464
H. PARK and K. WAGATSUMA

Transformations and Microstructures

- Effect of Nb(CN) Precipitation Conditions on Abnormal Grain Growth in Nb Added Steels 448
T. MURAKAMI, H. HATANO and H. YAGUCHI

Mechanical Properties

- Effects of the Grain Size and Volume Fraction of Second Hard Phase on Mechanical Properties
of Dual Phase Steel 457
D. KONDO, K. KUNISHIGE and R. UEJI