

"Tetsu-to-Hagané"

Vol.79 No.4, April, 1993

Contents

Lecture	Theory and Application of Thermo-Magneto Hydro Dynamics(II) / T.TANAHASHI	N263
Commentary	What is C₆₀? / E.OSAWA	N257
	The Mechanism of Reduction of Iron Oxides / Y.IGUCHI and S.HAYASHI	431
Special Presentation	Heat Resisiting Steels, Superalloys, and Ultra-high Temperature Materials / R.TANAKA	N282
Paper	In-flight Reduction of Fine Ores in a Hot Reducing Gas Flow / K.NOZAWA, M.SHIMIZU and S.INABA	443
	Production Test of High-carbon Ferromanganese Using a Shaft Type Furnace with Coke Packed Bed Injected with Highly Oxygen Enriched Air and a Large Quantity of Pulverized Coal	
	Y.KAMEI, T.MIYAZAKI and H.YAMAOKA	449
	Production Test of High-carbon Ferrochrome Using a Shaft Type Furnace with Coke Packed Bed Injected with Highly Oxygen Enriched Air and a Large Quantity of Pulverized Coal	
	Y.KAMEI, T.MIYAZAKI and H.YAMAOKA	456
	Bath Vibration in Bottom Blowing Trough Type Reactor	
	Y.FUKUZAWA, S.FURUYAMA, S.IWASAKI and A.FUKUZAWA	464
	Dissolution and Reduction Behavior of Manganese Ore in Less Slag Blowing at BOF	
	T.KANEKO and T.MATSUZAKI	472
	Controlling of Centerline Segregation of Continuously Cast Bloom by Continuous Forging Process	
	S.NABESHIMA, H.NAKATO, T.FUJII, K.KUSHIDA, H.MIZOTA and T.FUJITA	479
	Electromagnetic Atomization of Solid Metals Using Arc Discharge and Static Magnetic Field	
	T.SATSUTA, S.NINAGAWA, K.SASSA and S.ASAI	486
	Simple, Rapid, and Precise Determination of Manganese in Iron and Steel by Flow-injection Analysis	
	T.YAMANE and M.SAITO	492
	Evaluation of Parameters Affecting Mist Cooling Heat Transfer in High-temperature Region	
	H.OHKUBO and S.NISHIO	497
	Development of Simple Strain Distribution Measurement System by Interferometry Using CCD Image Elements / H.HONGO, H.MASUDA and Y.MONMA	504
	Effect of Impurities, Si and Mn Contents on Long Term Isothermal Temper Embrittlement of 3.5%NiCrMoV Steel Forgings for Turbine Rotors	
	M.KOHNO, T.TSUCHIYAMA, M.MIYAKAWA, S.KINOSHITA and A.SUZUKI	510
	Effects of Alloying Elements, Microstructure and Applied Stress on Amount of Saturated Temper Embrittlement and Embrittling Rate in Low Alloy Steels / M.KATSUMATA	517
	Strengthening of Austenitic Stainless Steels by Thermo-mechanical Control Process	
	S.YAMAMOTO, H.YOKOYAMA, T.ABE and Y.KOBAYASHI	524
	Effects of Al-content and Isothermal Hot-working Temperature on Microstructures of Thermomechanically Processed ($\alpha_2 + \gamma$)-type TiAl Alloys	
	M.HOSOMI, T.MAEDA and M.OKADA	531
Technical Article		T37
ISIJ Information Network		N257