

NIPPON STEEL & SUMIKIN ENGINEERING CO., LTD. TECHNICAL REVIEW

Vol. 8

January 2017

Contents

Preface	1
---------------	---

Technical Report

Steel Plant Field	1. Long Life Copper Stave for Blast Furnace Developed 4 by Nippon Steel & Sumikin Engineering ~Advanced Technologies of Cast-in steel Pipe Copper Stave~ Makoto GOTO
	2. Development of Induction Heating Device for Corner of13 Bloom in Continuous Casting machine ~Consideration of high efficiency induction heating system~ Yasuaki MIURA, Naoki KAMACHI, Masaya TAKUBO
	3. Transition of blast furnace relining technology,19 and challenge to a super-short term relining technology ~Establishment of single-module method of relining technology~ Hiroki TAGO, Hiroshi TAKASAKI, Kazuo SUZUMOTO, Manabu GOTO
Environmental Facilities Field	4. Development of Advanced Shaft Furnace26 ~Innovative system where significant reduction in coke use can be achieved~ Naoko YOSHIMOTO, Toshimi NAGATA, Junichi TAKADA, Mizuki NAMA, Shoh HIRAKURA
Building Construction & Steel Structures Field	5. Development of NS Eco-pile DUO32 ~Helical pile with High Bearing Capacity~ Masatoshi WADA, Sakae MARUYAMA, Kimihiro NAKAZAWA
Pipeline Field	6. Development of 20 degrees-V pulse MAG automatic welding39 ~Practical application of high efficiency and high quality automatic welding process~ Keigo MANABE, Kimikazu TANIMOTO, Yoshiyuki MATSUHIRO, Tooru SUSAMI

Product Report

Steel Plant Field	1. Equipment planning support of coke oven gas purification plants	46
	2. Fluidized Bed Dryer Coal Moisture Control	48
Environmental Facilities Field	3. Dehalocounter	51
	~Volatile organic chlorine compound decomposing bacteria detection technology~	
Building Construction & Steel Structures Field	4. NS buil-plus G.....	53
Pipeline Field	5. The tsunami safety panel systems for gas governor stations	55
New Business Field	6. Solid Fuel Making from Oil Palm Trunk	58
	~the development of a new squeezer~	