

CONTENTS

VOLUME 36

NUMBER 3

2006

STEEL IN TRANSLATION

PAGES

Iron Production

Effectiveness of blast-furnace smelting with coke nuts in the batch. S. L. Yaroshevskii, A. M. Kuznetsov, V. P. Padalka, N. S. Khlaponin, and A. V. Kuzin.....	1
Drag and gas permeability in granular bed. P. V. Tarasov.....	9
Gas dynamics in a bed of sintering batch. Z. K. Kabakov and A. A. Eliseev	15

Metallurgy of Steel and Ferroalloys

Improving transformer-steel smelting in the MMK converter shop. G. S. Senichev, R. S. Takhautdinov, Yu. A. Bodyaev, A. D. Nosov, A. V. Kutishchev, and A. S. Bessmertnykh	20
Water-jet secondary cooling of continuous-cast bar billet. V. V. Sokolov, D. B. Foigt, A. V. Khudyakov, and S. N. Kulaev	27
Optimizing the temperature field in a continuous-cast ingot. I. O. Mishchenko, A. V. Dub, E. V. Makarycheva, A. M. Lamukhin, and V. G. Ordin.....	30
Dc electroslag remelting with rotating consumable electrode. I. V. Chumanov and D. A. Pyatgin.....	39

Pressure Treatment of Metals

Optimal heating of rimmed-steel ingots. I. S. Kuznetsov, A. E. Prakhov, V. A. Antonov, and A. A. Umanskii	44
Corrosion products of hot-galvanized rolled steel. L. G. Sych, G. K. Kryuchkova, E. A. Senina, and I. V. Sergeeva.....	46
Shaping mill for producing special-purpose thin-walled tube and tubular shells. S. V. Samusev, A. N. Veremeevich, and D. V. Zakharov	48
Rolling flattened strip with a large width/thickness ratio. V. E. Lunev, M. I. Rumyantsev, and Yu. A. Purtov	52

Structure and Properties of Metals and Alloys

Influence of the stress on corrosion in pipelines. K. E. Garber.....	55
Flake prevention in large alloy-steel forgings. I. V. Doronin, A. D. Rusakov, A. B. Knyaz'kin, and D. A. Kozlov	59
Thermomechanical treatment of rolled bearing steel. Ya. I. Spektor, A. G. Prigunova, Yu. V. Yatsenko, and I. N. Kunitzskaya	65
Regulating the structure and properties of graphitized steel by pulsed- continuous ingot solidification. I. M. Aleksandrova, S. Yu. Makushev, A. V. Kushnarev, Yu. P. Petrenko, A. A. Kirichkov, A. V. Supov, and A. E. Khrulev	70

Production and application of magnetic plastics. I. V. Fedotov, A. A. Berlin, V. I. Tsvetkova, and V. P. Konovalov	77
Influence of deformation and heat treatment on the structure and mechanical properties of a bimetal obtained by centrifugal plating. S. D. Solov'ev and V. B. Dement'ev	81