

CODEN LGIAAZ

ISSN 1002-1043

CN 42-1265/TF

炼钢

STEELMAKING

Vol.40 / No.1 / 2024

ISSN 1002-1043



02>

9 771002 104249

万方数据

主办单位：武汉钢铁有限公司

中国金属学会

炼钢

LIANGANG

(双月刊 1985 年创刊)

第 40 卷 第 1 期

2024 年 2 月

目次

• 转炉及电炉冶炼 •

- 转炉炼钢几个关键技术的研究进展 李长海, 徐安军, 刘旋 (1)
- 顶底复吹转炉冶炼双相不锈钢的试验研究 李广帮, 赵亮, 孙深, 曹东, 孙殿东 (9)
- 转炉高锰铁水炼钢工艺研究 杨文远, 彭霞林, 王明林, 周军军, 孟华栋 (14)
- 转炉气化脱磷炉渣留渣吹炼成渣路线理论分析
..... 佟帅, 李晨晓, 王书桓, 艾立群, 薛月凯, 洪陆阔 (19)

• 炉外精炼 •

- 高硫塑料模具钢中硫稳定性控制基础研究
..... 乔家龙, 郭飞虎, 时朋召, 刘坚锋, 杨帆, 徐李军 (24)
- 炉渣碱度对 VD 处理钢洁净度的影响 翟万里, 印传磊, 赵余龙, 许正周 (32)
- RH 底喷粉精炼过程数值模拟研究 李伟峰, 赵腾, 张明, 符姣姣, 王广收 (39)
- 镁尖晶石砖在 RH 真空处理的应用及对钢水增铬的影响
..... 曹一, 孔勇江, 饶江平, 刘黎, 付刚强, 徐志华 (47)
- 钢包氩气流量对冷镢钢 SWRCH35K 中 DS 夹杂物的影响
..... 屠兴圻, 苏振伟, 周森, 赵赞 (52)

• 凝固与浇铸 •

- 铝脱氧钢中 Al_2O_3 夹杂物与 Al_2O_3 -C 质水口耐材的粘附机理研究
..... 于会香, 霍文聪, 邱光元, 郝丽霞, 刘春阳 (59)

• 节能环保 •

- 改质处理对钢渣矿物相转变和磷选择性浸出的影响
..... 范淑亮, 张羽堂, 蒋佳霖, 王建国, 杜传明 (68)
- 不锈钢粉尘冷态固结球团强度提升优化研究
..... 霍向涛, 杨志强, 李昊堃, 仪桂兰, 史永林, 张梅 (75)

CONTENTS

• BOF & EAF Steelmaking •

Research progress on several key technologies of converter steelmaking

..... LI Changhai, XU Anjun, LIU Xuan(1)

Experimental study on smelting duplex stainless steel in top bottom combined blowing converter

..... LI Guangbang, ZHAO Liang, SUN Shen, CAO Dong, SUN Diandong(9)

Research on high manganese iron molten steelmaking process of converter

..... YANG Wenyuan, PENG Xialin, WANG Minglin, ZHOU Junjun, MENG Huadong(14)

Theoretical analysis on the slag forming route of converter gasification dephosphorization slag with remaining slag blowing

..... TONG Shuai, LI Chenxiao, WANG Shuhuan, AI Liqun, XUE Yuekai, HONG Lukuo(19)

• Secondary Refining •

Research on sulfur stability control in high sulfur plastic die steel

..... QIAO Jialong, GUO Feihu, SHI Pengzhao, LIU Jianfeng, YANG Fan, XU Lijun(24)

Influence of slag basicity on the cleanness of molten steel with VD vacuum treatment

..... ZHAI Wanli, YIN Chuanlei, ZHAO Yulong, XU Zhengzhou(32)

Numerical simulation study on bottom powder injection in RH refining process

..... LI Weifeng, ZHAO Teng, ZHANG Ming, FU Jiaojiao, WANG Guangshou(39)

Application of magnesia spinel bricks in RH vacuum treatment and its effect on chromium increase in molten steel

..... CAO Yi, KONG Yongjiang, RAO Jiangping, LIU Li, FU Gangqiang, XU Zhihua(47)

Effect of argon flow rate on DS inclusions in cold heading steel SWRCH35K

..... TU Xingkuang, SU Zhenwei, ZHOU Miao, ZHAO Yun(52)

• Solidification & Continuous Casting •

Study on the adhesion mechanism of Al_2O_3 inclusions on Al_2O_3 -C refractory in Al killed steel

..... YU Huixiang, HUO Wencong, QIU Guangyuan, HAO Lixia, LIU Chunyang(59)

• Energy Conservation & Environmental Protection •

Effect of modification treatment on mineral phase transformation and selective leaching of phosphorus from

steelmaking slag FAN Shuliang, ZHANG Yutang, JIANG Jialin, WANG Jianguo, DU Chuanming(68)

Study on strength enhancement and optimization of stainless steel dust cold solidified pellets

..... HUO Xiangtao, YANG Zhiqiang, LI Haokun, YI Guilan, SHI Yonglin, ZHANG Mei(75)

