

電焊机®

ISSN 1001-2303
CN 51-1278/TM

中国科技核心期刊
中国科技论文统计源期刊
四川省优秀期刊



ELECTRIC WELDING MACHINE

焊接·切割·装备·材料·工艺

2023

5

第53卷
总第432期

●美国《剑桥科学文摘》(CSA)收录期刊 ●英国《科学文摘》(INSPEC)来源期刊
●俄罗斯《文摘杂志》收录期刊 ●波兰《哥白尼索引》(IC) ●美国《乌利希期刊指南》收录期刊

<http://www.71dhj.com>

 JASIC佳士®

数字化工业焊机



16402
展位号



服务热线

400-0011-588

ISSN 1001-2303



9 771001 230239

第26届

北京-埃森焊接与切割展(深圳)

广告

目次

重点关注

- 1 异种铝合金焊接研究现状及展望 杨健, 骆顺存, 裴鹏飞, 王晓南, 张海
- 12 蒸汽发生器焊接堵管残余应力数值模拟及寿命预测 杨二娟, 李勇, 米紫昊, 刘福广, 刘刚, 石岩松, 赵雷
- 21 不锈钢薄板激光焊接头变形及预测研究进展 张杨, 陈捷狮, 周斌, 张文帅, 仇晨龙, 杨尚磊
- 30 长输油气管道环焊缝工程临界评估技术的应用现状及探讨 孙培翔, 戴国文, 李学达, 周鑫, 韩彬
- 38 碳纤维复合材料/钛合金激光连接界面微结构调控工艺研究 井成虎, 徐纪豪, 孙圣元, 茹浩磊, 盛立远, 曾堃, 焦俊科
- 43 管线钢焊接接头韧性影响因素及评价方法 贾彦杰, 周聪, 李立英, 高建章, 杨健, 吴易哲, 吴彦鹏, 韩彬

焊接工艺

- 54 热处理对SLM制备钛合金散热结构组织性能的影响 赵萍, 刘鹏, 王建阳, 李怀学, 范宏举, 李壮胜
- 59 激光热处理对X100管线钢摩擦磨损性能的影响 顾正家, 严春妍, 吴晨, 吴立超, 张可召, 包晔峰
- 64 镀锌钢板激光填丝焊接工艺与接头力学性能研究 周牧, 周林柱, 李金宝, 周川川, 谷昊, 姜一帆
- 70 9%Ni钢薄板焊条电弧焊弯曲试验开裂分析及改善 戴光明, 江国焱, 尹东杨, 李浩然, 王苗苗
- 77 搅拌针形貌对2219铝合金搅拌摩擦焊接头性能的影响 杜海泉, 范翼飞, 王一, 李力, 柯权
- 84 小口径低碳钢-不锈钢复合钢管焊接新工艺 王育才
- 89 导热油压力管道焊缝裂纹产生原因分析与分布规律研究 吕钟杰, 张子健, 钟军平, 林远龙, 徐无波, 徐律行, 包瑜婷
- 95 不锈钢烧结网滤芯TIG焊工艺研究 郭雨菲, 侯宗宗, 赵斌

焊接材料

- 99 不锈钢焊缝铁素体含量预测方法综述 杨昊泉, 郭泉, 宋北, 李苏珊, 吕晓春
- 107 稀土元素Y对铁基耐磨堆焊层组织和性能的影响 刘治宇, 冯宇轩, 刘政军, 刘峥, 王振宇
- 113 LNG储罐用高锰低温钢埋弧焊焊接材料及工艺研究 陈成, 汪昌红, 包润新, 汪涛, 魏艳, 张翔, 余超

焊接设备

- 119 新型磁心材料电抗器的脉冲焊接控制方法 陈超, 王新
- 125 船舶管系柔性智能化管加工生产线解决方案及研制 汪忠
- 134 超长工件免示教焊接工作站研究 王琳, 赵金东, 潘艳飞, 刘新
- 140 基于STM32的核电站管道TIG自动焊控制系统设计 王世培, 孙秋阳, 王海东, 李竹渊, 潘国伟, 刘金平, 姚舒扬

焊接教学

- 145 新版《国家职业资格培训教程·焊工系列》编写概况 马青军, 李连胜, 武昭好, 郑桂红, 黄瑞生, 方乃文

Electric Welding Machine

Contents

Start Publication in 1971 (Monthly)

Total 432 th Vol.53 No.5 May 2023

Important Issue

- 1 Research Status and Prospect of Dissimilar Aluminum Alloy Welding
..... YANG Jian, LUO Shuncun, PEI Pengfei, WANG Xiaonan, ZHANG Hai
- 12 Numerical Simulation of Residual Stress and Life Prediction of Welding Blocked Pipes of Reactor Steam Generator
..... YANG Erjuan, LI Yong, MI Zihao, LIU Fuguang, LIU Gang, SHI Yansong, ZHAO Lei
- 21 Research Progress on Deformation and Prediction of Laser Welding Joint of Stainless Steel Sheet
..... ZHANG Yang, CHEN Jieshi, ZHOU Bin, ZHANG Wenshuai, QIU Chenlong, YANG Shanglei
- 30 Application Status and Discussion of ECA Technology in Girth Welds of Oil and Gas Pipelines
..... SUN Peixiang, DAI Guowen, LI Xueda, ZHOU Xin, HAN Bin
- 38 Study on Interface Control Technology of Carbon Fiber Composite Titanium Alloy Laser Welding
..... JING Chenghu, XU Jihao, SUN Shengyuan, RU Haolei, SHENG Liyuan, ZENG Kun, JIAO Junke
- 43 Research Status of Influencing Factors and Evaluation Methods for Toughness of Pipeline Steel Joints
..... JIA Yanjie, ZHOU Cong, LI Liying, GAO Jianzhang, YANG Jian, WU Yizhe, WU Yanpeng, HAN Bin

Welding Technology

- 54 Effect of Heat Treatment on the Microstructure and Properties of TC4 Titanium Alloy Cooling Structure Prepared by SLM
..... ZHAO Ping, LIU Peng, WANG Jianyang, LI Huaixue, FAN Hongju, LI Zhuangsheng
- 59 Effect of Laser Heat Treatment on Friction and Wear Properties of X100 Pipeline Steel
..... GU Zhengjia, YAN Chunyan, WU Chen, WU Lichao, ZHANG Kezhao, BAO Yefeng
- 64 Study on Process Characteristic and Mechanical Properties of Laser Welding with Filler Wire for Dissimilar Galvanized Steel Sheets
..... ZHOU Mu, ZHOU Linzhu, LI Jinbao, ZHOU Chuanchuan, GU Hao, JIANG Yifan
- 70 Analysis and Improvement of the Cracking of Bending Test by Electrode Arc Welding based on 9%Ni steel sheet
..... DAI Guangming, JIANG Guoyan, YIN Dongyang, LI Haoran, WANG Miaomiao
- 77 Effect of Pin Morphology on the Performance of FSW Joint of 2219 Aluminum Alloy
..... DU Haiquan, FAN Yifei, WANG Yi, LI Li, KE Quan
- 84 A Welding Method for Low Carbon–Stainless Steel Combined Tube with Small Diameter WANG Yucai
- 89 Cause Analysis and Distribution Law of Weld ECrack in Heat Transfer Oil Pressure Pipeline
..... LV Zhongjie, ZHANG Zijian, ZHONG Junping, LIN Yuanlong, XU Wubo, XU Lvhang, BAO Yuting
- 95 Study on TIG Welding Process of Stainless Steel Sintered Mesh Filter Element GUO Yufei, HOU Zongzong, ZHAO Bin

Welding Material

- 99 Review of Prediction Methods of Ferrite Content in Stainless Steel Weld Metal
..... YANG Haoquan, GUO Xiao, SONG Bei, LI Sushan, LV Xiaochun
- 107 Effect of Rare Earth Element Y on Structure and Properties of Iron–Based Wear–Resistant Surfacing Layer
..... LIU Zhiyu, FENG Yuxuan, LIU Zhengjun, LIU Zheng, WANG Zhenyu
- 113 Research on Welding Material and Process of High Manganese Low Temperature Steel SAW for LNG Storage Tank
..... CHEN Cheng, WANG Changhong, BAO Runxin, WANG Tao, WEI Yan, ZHANG Xiang, YU Chao

Welding Equipment

- 119 Pulse Welding Control Method Using New Magnetic Core Material Reactor CHEN Chao, WANG Xin
- 125 Solution and Research of Flexible Intelligent Pipe Processing Production Line for Ship Piping System WANG Zhong
- 134 Research on Teaching Free Welding Workstation for Overlength Workpiece ... WANG Lin, ZHAO Jindong, PAN Yanfei, LIU Xin
- 140 Design of Automatic TIG Welding Control System for Nuclear Power Plant Pipeline Based on STM32
..... WANG Shipai, SUN Qiuyang, WANG Haidong, LI Zhuyuan, PAN Guowei, LIU Jinping, YAO Shuyang

Welding Education

- 145 Preparation Overview of New Edition of "National Vocational Qualification Training Course • Welder Series"
..... MA Qingjun, LI Liansheng, WU Zhaoyu, ZHENG Guihong, HUANG Ruisheng, FANG Naiwen

T T P S / i

TWIN 双丝协同 焊接系统



自动调节工艺



熔敷效率高



焊接速度快

了解更多我们的产品
欢迎访问：
www.fronius.cn



Effortless
control to
unleash
your welding
potential

伏能士智能设备(上海)有限公司

上海市机器人产业园 上海市宝山区 富联二路177弄2号楼
电话: 86-21-26063200
电邮: pw_sales_cn@fronius.com