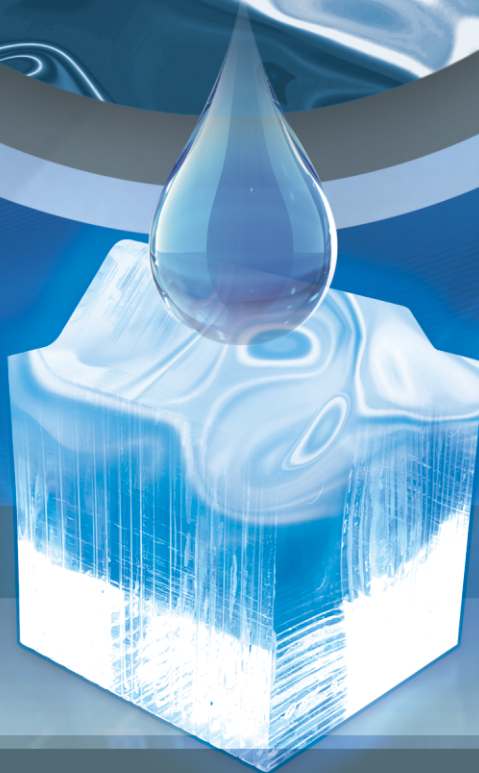


精密成形工程

OF NETSHAPE FORMING ENGINEERING

超厚壁聚合物光学产品
多次注射-压缩成形技术研究

作者：高若翔 / 焦晓龙 / 阮剑波 / 陈豪 / 周期峰 / 赵朋



目次 CONTENTS

轻合金成形 Light Alloy Forming

1 高压热处理对 TC11 钛合金组织及力学性能的影响

Effect of High-pressure Heat Treatment on Microstructure and Mechanical Properties of TC11 Titanium Alloy

苗芳, 吴慧云, 鲁泽, 张梦飞, 顾涛, 刘建华, 鲁若鹏, 闫志杰

MIAO Fang, WU Hui-yun, LU Ze, ZHANG Meng-fei, GU Tao, LIU Jian-hua, LU Ruo-peng, YAN Zhi-jie

8 间隙填充电弧增材制造成形质量及组织性能研究

Forming Quality, Microstructure and Mechanical Properties of Gap-filling Wire and Arc Additive Manufacturing

周建鹏, 张军, 邢彦锋

ZHOU Jian-peng, ZHANG Jun, XING Yan-feng

17 选区激光熔化 Ti6Al4V 梯度多孔结构工艺优化

Process Optimization of Selective Laser Melting for Ti6Al4V Gradient Porous Structure

王靖, 曾寿金, 魏青天, 何伟辉, 叶建华

WANG Jing, ZENG Shou-jin, WEI Qing-tian, HE Wei-hui, YE Jian-hua

28 转速对 6061 铝合金搅拌摩擦搭接接头组织和力学性能的影响

Effect of Rotational Speed on Joint Microstructure and Mechanical Properties of 6061 Aluminum Alloy Friction Stir Lap Weld Joint

曹高威, 王进, 孙守义

CAO Gao-wei, WANG Jin, SUN Shou-yi

37 含 Sn 稀土镁合金成分的正交设计研究

Orthogonal Design on Composition of Rare-earth Magnesium Alloys Containing Sn

王富琳, 李宇飞, 李泽华, 熊俊杰, 李笑, 常博文, 车昶, 徐时晶

WANG Fu-lin, LI Yu-fei, LI Ze-hua, XIONG Jun-jie, LI Xiao, CHANG Bo-wen, CHE Chang, XU Shi-jing

复合材料成形 Composites Forming

47 超厚壁聚合物光学产品多次注射-压缩成形技术研究

Multilayer Injection-compression Molding Process of Ultra-thick-walled Polymer Optical Products

高若翔, 焦晓龙, 阮剑波, 陈豪, 周期峰, 赵朋

GAO Ruo-xiang, JIAO Xiao-long, RUAN Jian-bo, CHEN Hao, ZHOU Qi-feng, ZHAO Peng

57 化学发泡剂含量对秸秆纤维/聚丙烯复合材料性能的影响机理

Effects of Chemical Blowing Agent Content on Properties of Straw Fiber/Polypropylene Composites

李伟, 郝加杰, 李文鹏, 袁泉, 郭巍, 孟正华

LI Wei, HAO Jia-jie, LI Wen-peng, YUAN Quan, GUO Wei, MENG Zheng-hua

65 基于 Moldflow 和 UG 的活动盖板数值仿真分析及模具设计

Numerical Simulation Analysis and Mold Design of Movable Cover Plate Based on Moldflow and UG

谭安平, 段扬, 陶星兴, 骆静, 李又兵

TAN An-ping, DUAN Yang, TAO Xing-xing, LUO Jing, LI You-bing

钢铁成形 Iron and Steel Forming

74 304 不锈钢激光焊接接头组织性能及断裂机理研究

Microstructure, Properties and Fracture Mechanism of 304 Stainless Steel Welding Joint by Laser

吕光宙, 马泽铭, 许爱军, 郭文俊, 代国宝, 郭伟夺

LYU Guang-zhou, MA Ze-ming, XU Ai-jun, GUO Wen-jun, DAI Guo-bao, GUO Wei-duo

83 PHS1800 热成形钢电阻点焊接头截面特性及工艺优化

Section Characteristics and Process Optimization of Resistance Spot Welding Joint for PHS1800 Press Hardening Steel

刘岩, 刘晓昂, 叶海青, 杨栈琳, 刘澳

LIU Yan, LIU Xiao-ang, YE Hai-qing, YANG Zhan-lin, LIU Ao

90 双相不锈钢 2205 激光焊接接头组织和性能研究

Microstructure and Properties of 2205 Duplex Stainless Steel Joint by Laser Welding

徐永朝, 李天庆, 万永杰, 李远航, 王凯

XU Yong-chao, LI Tian-qing, WAN Yong-jie, LI Yuan-hang, WANG Kai

99 汽轮机转轴表面 CMT 修复层微观组织及力学性能对比研究

Comparative Study of Microstructure and Mechanical Properties in CMT Repair Layers on Surface of Steam Turbine Rotor

邵光辉, 杨克, 邹晓东, 易江龙, 刘俊建

SHAO Guang-hui, YANG Ke, ZOU Xiao-dong, YI Jiang-long, LIU Jun-jian

108 车轮钢闪光对焊工艺参数对焊接接头性能的影响

Effect of Flash Butt Welding Process Parameters on Mechanical Properties of Welded Joints in Wheel Steel

王金凤, 苏文超, 车亚军, 袁耀, 黄哲凯, 黄利明, 刘峰

WANG Jin-feng, SU Wen-chao, CHE Ya-jun, YUAN Yao, HUANG Zhe-kai, HUANG Li-ming, LIU Feng

117 27SiMn 钢窄间隙 GMAW 环焊缝开裂原因分析

Cracking Causes of 27SiMn Girth Weld by Narrow Gap GMAW

刘晟, 常云峰, 兰志宇, 刘晓芳, 李争, 秦建

LIU Sheng, CHANG Yun-feng, LAN Zhi-yu, LIU Xiao-fang, LI Zheng, QIN Jian

125 BS600 高强度油罐车罐体轻量化研究

Lightweight of BS600 High Strength Steel Oil Tank Trucks

吴饶福, 朱春东, 石磊, 夏曦

WU Rao-fu, ZHU Chun-dong, SHI Lei, XIA Xi

133 车用高强度钢板模内淬火组织演变研究

Microstructure Evolution of Thick Plates of High Strength Steel for Vehicles during In-die Quenching Process

王敏, 解晓清, 陈荣创, 刘贤龙, 李兵

WANG Min, XIE Xiao-qing, CHEN Rong-chuang, LIU Xian-long, LI Bing

高温合金成形 Superalloy Forming

141 镍基高温合金调压铸造非线性压力曲线设计与验证

Design and Verification of Nonlinear Pressure Curve for Pressure Regulation Casting of Nickel Base Super-alloy

王迪, 隋大山, 李九霄, 董安平, 刘明亮, 齐飞, 易出山, 雷四雄, 史志武, 张国栋

WANG Di, SUI Da-shan, LI Jiu-xiao, DONG An-ping, LIU Ming-liang, QI Fei, YI Chu-shan, LEI Si-xiong, SHI Zhi-wu,

ZHANG Guo-dong

152 镍基单晶高温合金对接平台内缩松缺陷的形成机制研究

Formation Mechanism of Porosity Defects in Rejoined Platforms of Ni-based Single Crystal Superalloy

霍苗, 简航岳, 陈楚玥, 赵惠

HUO Miao, JIAN Hang-yue, CHEN Chu-yue, ZHAO Hui

159 15CrMoG 耐高温合金钢 Johnson-Cook 本构模型建立与精度分析

Establishment and Accuracy Analysis of Johnson-Cook Constitutive Model for 15CrMoG High-temperature Resistant Alloy Steel

杨京, 王伟, 张双杰, 马世博, 闫华军

YANG Jing, WANG Wei, ZHANG Shuang-jie, MA Shi-bo, YAN Hua-jun

168 选择性激光熔化 (SLM) 成形纯钨的微观组织与力学性能研究

Microstructure and Mechanical Properties of Pure Tungsten Fabricated by Selective Laser Melting (SLM)

苏玉东, 汪志勇, 范小松, 马建国, 吴杰峰, 朱协彬, 翟华

SU Yu-dong, WANG Zhi-yong, FAN Xiao-song, MA Jian-guo, WU Jie-feng, ZHU Xie-bin, ZHAI Hua

技术创新 Technology Innovation

175 基于改进 FNN-CCC 的双伺服压力机同步控制策略研究

Synchronous Control Strategy of Dual Servo Press Based on Improved FNN-CCC

宋燕利, 程寅峰, 曹威圣, 路珏, 杨真国

SONG Yan-li, CHENG Yin-feng, CAO Wei-sheng, LU Jue, YANG Zhen-guo

183 高表面粗糙度 6061 铝合金的两酸抛光工艺研究

Two-acid Polishing Process of 6061 Aluminum Alloy with High Surface Roughness

许芳, 汪玉, 方倩雯, 滕心跃, 王志强, 乔叶平, 王振卫

XU Fang, WANG Yu, FANG Qian-wen, TENG Xin-yue, WANG Zhi-qiang, QIAO Ye-ping, WANG Zhen-wei

192 叶片厚度变化对船用轴流涡轮性能的影响

Effects of Blade Thickness on Performance of Marine Axial-flow Turbines

吴旭辉

WU Xu-hui

198 基于 Ansys 的锂电池极片辊压质量改善研究

Rolling Quality Improvement of Lithium Battery Pole Pieces Based on Ansys

刘文可, 邹胜, 李学勇, 陈建平, 卓世高

LIU Wen-ke, ZOU Sheng, LI Xue-yong, CHEN Jian-ping, ZHUO Shi-gao

广告索引

封二、封三 国防科技工业复杂构件挤压成形技术创新中心



精密成形工程

主办单位：
西南技术工程研究所
国防科技工业精密塑性成形技术研究应用中心

精密成形工程

第十五卷
第九期

二〇二三年九月

ISSN 1674-6457



9 771674 645231

09

连续出版物号

ISSN 1674-6457
CN 50-1199/TB

邮发代号:78-235 定价:35.00元