



新技术新工艺

2013 3

NEW TECHNOLOGY & NEW PROCESS

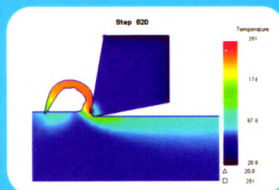
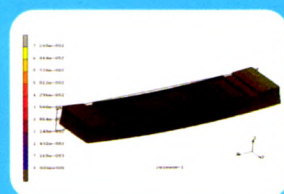
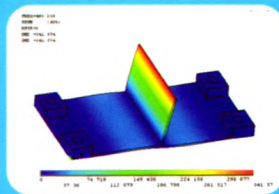
月刊

残余应力与变形控制 整体解决方案 供应商



提供型号装备快速制造、批量制造工艺解决方案及交钥匙工程

基于残余应力预测、加工过程仿真及工艺参数优化、模态分析、应力检测、频谱谐波时效等最前沿技术



- 指导——结构优化设计
- 控制——加工过程变形
- 定型——消除应力工艺
- 评估——变形控制及应力消除效果



SEMBOO 翔博科技

残余应力与变形控制联合实验室

北京翔博科技有限责任公司
 电话：400-650-1016
 网址：www.semboo.com
 地址：北京市海淀区知春路108号豪景大厦A座8F

ISSN 1003-5311



03

万方数据

9 771003 531136




数字技术与机械工程

- 1 安全自动化拆卸弹体的冒口漏斗和成型冲技术
郭洪斌, 张欲立, 孟凡军, 高晓非, 李琳琳, 何毅, 孙阳
- 4 论常规型游梁式抽油机的机械平衡
马武, 张力, 刘健, 张凯
- 6 激光熔覆组合式送粉喷嘴的研制
苏伦昌, 董春春, 李振, 杜学芸
- 9 基于CFD加油枪结构的优化
谢松林
- 11 MasterCAM软件在航空发动机零部件数控加工编程中的应用
龚环球
- 15 基于TRANSYS的严寒地区太阳能和地源热泵联合应用技术研究
潘建伍
- 18 剪叉式升降机受力分析及有限元仿真
赵明君, 刘剑雄, 常安民, 李军
- 21 移栽机支承部件受力分析及有限元仿真
常安民, 刘剑雄, 赵明君, 李军
- 25 基于ANSYS的电动汽车动力电池温度场的研究
钱舜田, 谢伟东
- 29 基于RE和RP的前杯托盖试件制造
徐自明
- 31 基于OrCAD/Pspice的电路性能分析方法
高芙蓉
- 34 超精密加工中零件的装夹技术
郑喜朝
- 37 椭圆齿轮计量系统的改进
王建秀
- 39 基于协同仿真的输弹机动力学建模与分析
金朝, 秦俊奇, 狄长春, 张小嘎
- 43 大型海洋平台组块整体安装技术研究
梁羽
- 46 基于虚拟样机技术的某自行火炮火力系统发射动力学特性分析
化斌斌, 马吉胜, 邓辉咏, 卓洪波, 吴大林
- 49 粉末注射成型最佳粉末装载量的确定方法研究
曹广元, 邓子玉, 任亮, 李艳娟
- 52 用于测量炸药在有限空间内爆炸特性的试验装置
张建雄, 李媛媛, 王洪海, 罗妮娜
- 55 浅谈TLJ 900型架桥机的结构组成及应用
张应和




设计计算与试验研究

- 
- 58 物料运输车底架的应变测试研究 陈玲, 舒大文, 张毅杰, 章继楠, 陈寅鸣, 龙苗
- 60 硬态切削高强度钢表面完整性的研究 耿琼, 解丽静, 王西彬
- 65 某平面度检测机的设计 荣溪超, 曾玉芸, 张勇, 莫新民, 白纯洁
- 67 平板调平装置的设计 陈晔
- 69 基于LS DYNA的分条圆盘剪剪切力的计算研究 戴志凯, 许平, 张宝勇, 刘小臣
- 72 一种类滚动体全项检测分选仪设计 张勇, 张纪磊, 孙江
- 75 轴流式压缩机叶片振动特性及固有频率分析 白静
- 79 基于贝叶斯估计的测试性仿真评估方法研究 宋丽蔚, 白普易, 李刚
- 82 阵风载荷作用下高耸结构利用TLCD的减振性能研究 贺一晓, 李功宇, 黄维

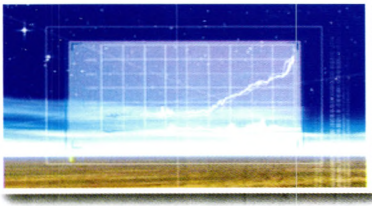
加工工艺与材料研究

- 
- 85 金属橡胶的研究进展及其应用 李拓, 白鸿柏, 路纯红, 李玉龙
- 90 铝锂合金预腐蚀疲劳退化研究 李旭东, 刘治国, 穆志韬
- 93 PCrNi3MoVA高速侧铣加工研究 王德青, 焦黎, 王西彬, 庞思勤
- 99 超塑性固态焊接研究进展 宋小波, 杜随更, 姜哲

电子信息与自动控制

- 
- 102 PLC控制压滤机在油田污水处理上的应用 郭有胜, 王春光, 刘丽红, 孟凡军, 贺飞, 李琳琳
- 104 浅议产品零件测量信息化系统 高长奇, 李显文, 金湘
- 107 某型火炮电解液沉淀池PID温度控制 高君, 何毅, 张欲立, 杨浩, 刘丽红
- 110 集成运算放大器在整流电路中的应用 马杰, 姚静波, 辛朝军
- 112 基于北斗-物联网技术的导航信息系统探讨 赵学洋, 李海红

质量控制与故障分析

- 
- 115 某型高炮自动机故障树模块化分解与结构重要度研究 王志松
- 118 纳米压痕理论在残余应力检测方面的技术进展 李青, 刘士峰
- 121 继电保护装置插件防护工艺及实施 郭晓甫

Contents

Digital Technique and Mechanical Engineering

Security Automation Remove Projectile of Riser Funnel and Forming Impact Technology
..... GUO Hongbin, ZHANG Yuli, MENG Fanjun, GAO Xiaofei, LI Linlin, HE Yi, SUN Yang (1)

Mechanical Balance for the Conventional Beam Oil Extractor.....MA Wu, ZHANG Li, LIU Jian, ZHANG Kai (4)

Development of Combined Gravity Feeding Nozzle for Laser Cladding SU Lunchang, DONG Chunchun, LI Zhen, DU Xueyun (6)

Structure Optimization of Fuel Truck Nozzle based on CFD.....XIE Songlin (9)

Application of MasterCAM Software in NC Programming of the Aviation Engine Parts.....GONG Huanqiu (11)

Research on Combined Application Technology of Solar and Ground Source Heat Pump in Severe Cold Area based on TRNSYS
..... PAN Jianwu (15)

Force Analysis and Finite Element Simulation of Scissor Elevators..... ZHAO Mingjun, LIU Jianxiong, CHANG Anmin, LI Jun (18)

Force Analysis and Finite Element Simulation on Supporting Part of Transplanting Machine
..... CHANG Anmin, LIU Jianxiong, ZHAO Mingjun, LI Jun (21)

Research on the Thermal Behavior of EV's Power Battery based on ANSYS.....QIAN Shuntian, XIE Weidong (25)

Manufacture of Front Cup Holder Cover Sample based on RE and RP..... XU Ziming (29)

Circuit Performance Analysis for Circuit based on OrCAD/PSpice GAO Meirong (31)

Parts Clamping Technology in Super Precision ProcessingZHENG Xichao (34)

Improvement of Measurement System of Elliptic Gear WANG Jianxiu (37)

Dynamic Modeling and Analysis of the Ramming Device based on Cosimulation..... JIN Zhao, QIN Junqi, DI Changchun, ZHANG Xiaoga (39)

Research on Technology of Large Marine Platform Chunks overall Install..... LIANG Yu (43)

Firing Dynamic Response Analysis of a Selfpropelled Artillery Fire System based on Virtual Prototype Technology
.....HUA Binbin, MA Jisheng, DENG Huiyong, ZHUO Hongbo, WU Dalin (46)

Research on Determination Method of Measuring the Best Powder Loading of Powder Injection Molding
..... CAO Guangyuan, DENG Ziyu, REN Liang, LI Yanjuan (49)

Device for Testing Explosive Detonation Performance in Limited SpaceZHANG Jianxiong, LI Yuanyuan, WANG Honghai, LUO Nina (52)

Structure Composition and Application of TLJ 900 Type of Bridge Girder Erection Machine ZHANG Yinghe (55)

Design Calculation and Experimental Investigation

Research on Strain Test of Underbed of a Material Truck
.....CHEN Ling, SHU Dawen, ZHANG Yijie, ZHANG Ji nan, CHEN Yinming, LONG Miao (58)

Research on Surface Integrity in Hard Turning of High Strength Steel..... GENG Qiong , XIE Lijing , WANG Xibin (60)

Design of Flatness Measuring Machine..... RONG Xichao, ZENG Yuyun, ZHANG Yong, MO Xinmin, BAI Chunjie (65)

Design of Automatic Leveling Control DeviceCHEN Ye (67)

Research on Shearing Force Calculation of Rotary Gang Slitting based on LSDYNA
.....DAI Zhikai, XU Ping, ZHANG Baoyong, LIU Xiaochen (69)

Design of a kind of Detecting Sorter with Full Information for Similar Rolling Elements ZHANG Yong, ZHANG Jilei, SUN Jiang (72)

Analysis of Vibration Specific and Natural Frequency of Axialflow Compressor Blades BAI Jing (75)

Research on Test Simulation Assessment Method based on Bayes..... SONG Liwei, BAI Puyi, LI Gang (79)

Vibration Reduction Effects of Highrise Structures with TLCD under the Force of Gust.....HE Yixiao, LI Gongyu, HUANG Wei (82)

Processing Technics and Investigation of Materials

Research and Application in Development of Metal RubberLI Tuo, BAI Hongbai, LU Chunhong, LI Yulong (85)

Research on Fatigue Degradation of AlLi Alloy with Corrosion Damage LI Xudong, LIU Zhiguo, MU Zhitao (90)

Research on Highspeed Cylindrical Milling of PCrNi3MoVA..... WANG Deqing, JIAO Li, WANG Xibin, PANG Siqin (93)

Research Development of Superplastic Solidstate Welding..... SONG Xiaobo, DU Suigeng, JIANG Zhe (99)

Electronics Information and Automatic Control

Application of PLC Control Pressure Filter in Oilfield Wastewater Treatment
.....GUO Yousheng, WANG Chunguang, LIU Lihong, MENG Fanjun, HE Fei, LI Linlin (102)

Discussion on Elementary Product Parts Measurement Information System
.....GAO Changqi, LI Xianwen, JIN Xiang (104)

Pond PID Temperature Control of a Certain Artillery Electrolyte Precipitates
..... GAO Jun, HE Yi , ZHANG Yuli, YANG Hao, LIU Lihong (107)

Application of Integrated Operation Amplifier in Rectification Circuit..... MA Jie YAO Jingbo, XIN Chaojun (110)

Exploration of Navigation Information System based on Beidou Internet of Things Technology
.....ZHAO Xueyang, LI Haihong (112)

Quality Control and Malfunction Analysis

Research on Modular Decomposition and Structure Importance of FTA of Automaton of Antiaircraft Gun..... WNAG zhisong (115)

Development of Nanoindentation Theory on Detection of Residual Stress LI Qing, LIU Shifeng (118)

Plugin Unit Protective Technology of Relay Protector and Its Implementation..... GUO Xiaofu (121)