

# 起重运输机械®

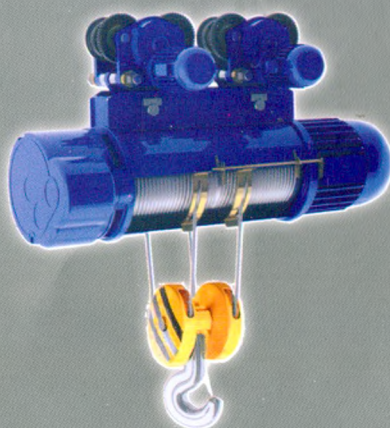
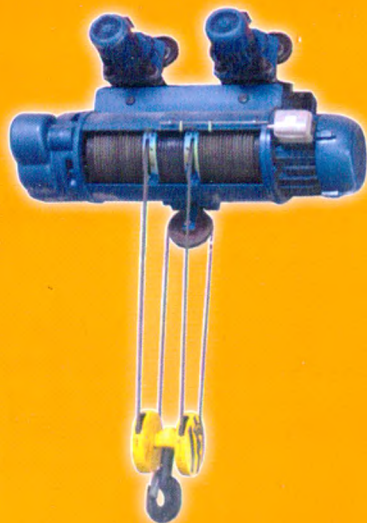


QIZHONG YUNSHU JIXIE

HOISTING AND CONVEYING MACHINERY

2012 11

北京起重运输机械设计研究院 主办



## 公司主要从事生产

- ★ 防爆电动葫芦
- ★ CD1 MD 型电动葫芦
- ★ HC 型电动葫芦
- ★ 防爆起重机
- ★ 桥、门式起重机
- ★ 特种起重机



## 南京高锐特起重机械有限公司

NANJING GAORUITE HOISTING MACHINERY CO.,LTD

地址：南京六合经济开发区

电话：02568902297

电子信箱：chinagrt96@126.com

邮编：211514

传真：02568902298

网址：www.chinagrt.cn



# 目次

## Contents

### 专题综述

基于模糊层次分析法的造船门式起重机裂纹结构缺陷安全评估\* ..... 黄凯 李淑娟 李向东 (1)  
Safety assessment for defective crack structure of shipbuilding gantry crane based on fuzzy analytical hierarchy process ..... Huang Kai, Li Shujuan, Li Xiangdong

港口登船设备技术分析 ..... 胡思唐 (6)  
Technical analysis of boarding equipment ..... Hu Sitang

### 设计·计算

钢结构多出口给配料仓结构计算 ..... 吴位民 马魁文 李勇 (11)  
Calculation for structure of steel storage and distribution silo with multi-discharge outlets

..... Wu Weimin, Ma Kuiwen, Li Yong  
门式起重机的减摆PID控制系统 ..... 杨会珍 李虹 赵勇 (16)  
Anti-swing PID control system for gantry crane ..... Yang Huizhen, Li Hong, Zhao Yong

航空货运站集装货处理系统设计选型研究 ..... 梅宝兴 (21)  
Design and model selection for unit cargo handling system at air cargo terminal ..... Mei Baoxing

嵌入式铅酸蓄电池组在线监测系统的设计 ..... 吴铁庄 任武 (25)  
Design of on-line monitoring system for embedded lead-acid batteries ..... Wu Tiezhuang, Ren Wu

核电厂燃料抓取机桥架驱动机构自主化设计 ..... 黄然 贺小明 (30)  
Self-reliance design for bridge drive mechanism of fuel handling machine in nuclear power plant

..... Huang Ran, He Xiaoming  
基于图像识别技术的自动化岸边集装箱起重机设计 ..... 李普林 柏伟 (33)  
Design of automatic quayside container crane based on image recognition technology ..... Li Pulin, Bai Wei

### 新产品·新技术

基于风险预测的塔式起重机防碰撞迭代算法研究 ..... 高怡 高顺德 曹旭阳 孙颖智 (36)  
Iterative algorithm research on anti-collision of tower crane based on risk prediction

..... Gao Yi, Gao Shunde, Cao Xuyang, Sun Yingzhi  
ME150 + 110/25 - 83A5 型门式起重机的研制 ..... 代宇 张天彤 (41)  
Research and development of ME150 + 110/25-83A5 gantry crane ..... Dai Yu, Zhang Tiantong

同步带传动在有轨巷道堆垛起重机中的应用 ..... 刘红于 靖 孙凯峰 姜琳 王鑫 (45)  
Application of synchronous belt drive in rail-mounted aisle stacking crane

..... Liu Hong, Yu Jing, Sun Kaifeng, Jiang Lin, Wang Xin  
新型旋转小车式桥式起重机 ..... 张勇 何昊昊 (48)  
Overhead travelling crane with new rotary trolley ..... Zhang Yong, He Haojiong

基于IGBT整流回馈多传动的起重机电气系统集成简介 ..... 魏彬 (51)  
Introduction to IGBT rectificative/regenerative multi-drive based electrical system for crane ..... Wei Bin

### 分析·研究

平衡截断法在带式输送机系统模型降阶中的应用 ..... 岳宇鹏 (53)  
Application of balanced-truncation method in system model reduction of belt conveyor ..... Yue Yupeng

侧三支点臂式斗轮堆取料机稳定性影响因素分析 ..... 徐万鑫 黄有义 于会春 (59)  
Analysis of influencing factors for stability of three-side-supporting-point boom type bucket-wheel

stacker/reclaimer ..... Xu Wanxin, Huang Youyi, Yu Huichun  
高速托辊滚动轴承的分析 ..... 孙海燕 包继华 (63)  
Analysis for high-speed idler antifriction bearing ..... Sun Haiyan, Bao Jihua

独立驱动装置及其滑移转向的研究 ..... 田甜 王志洪 曼 陈宇 (66)  
Research on individual drive device and skid steering ..... Tian Tian, Wang Zhi, Hong Man, Chen Yu

液压系统密封失效的模糊综合评价 ..... 刘学新 杨秀萍 (71)  
Fuzzy comprehensive evaluation for sealing failure of hydraulic system ..... Liu Xuexin, Yang Xiuping

柔性附着吊臂塔式起重机塔身 APDL 参数化建模及有限元分析\* ..... 张晓霞 章金成 李东来 艾莹 林旭 (74)  
APDL parametric modeling and finite element analysis for tower body of flexible attachment luffing

tower crane ..... Zhang Xiaoxia, Zhang Jincheng, Li Donglai, Ai Ying, Lin Xu  
多支点过轨起重机金属结构有限元分析 ..... 沈黎 (78)  
Finite element analysis of metal structure of multi-fulcrum over-rail crane ..... Shen Li

丹江口加高工程布料机结构模态分析 ..... 廖湘辉 陈文琛 孙海涛 杨悬 (82)  
Modal analysis of spreader structure for Danjiangkou dam heightening project

..... Liao Xianghui, Chen Wenchen, Sun Haitao, Yang Xuan

起重机起升机构制动器电气控制的理解 ..... 袁 征 (85)  
 Understanding of electrical control to brake for crane hoisting mechanism ..... Yuan Zheng

### 试验·研究

球形物料螺旋输送能力影响因素的试验分析 ..... 崔海博 赵惠清 张 杨 张有忱 (87)  
 Experimental analysis for impact factors of screw conveying capacity for spherical materials  
 ..... Cui Haibo, Zhao Huiqing, Zhang Yang, Zhang Youchen

### 故障分析

基于 Ansys 的桥式起重机焊接箱形梁疲劳裂纹研究 ..... 殷玉枫 曾 光 吕西波 张孟辉 (91)  
 Ansys-based research on fatigue crack of welded box girder for overhead travelling crane  
 ..... Yin Yufeng, Zeng Guang, Lü Xibo, Zhang Menghui

倒拉反接制动下降运行时下降限位开关的设置 ..... 任书才 陈素艳 (94)  
 Setting of limit switches for plug braking descending ..... Ren Shucai, Chen Suyan

### 设备·技术

管控一体化技术在黄骅港三期工程中的应用 ..... 宋文亮 许 宁 宋桂江 (96)  
 Application of management & control integration technology in Huanghua port phase-3 project  
 ..... Song Wenliang, Xu Ning, Song Guijiang

液压式强夯机倾翻问题分析及解决方法 ..... 马永杰 赵 霞 (101)  
 Analysis of tipping problems with hydraulic strong tamping machine and the solutions  
 ..... Ma Yongjie, Zhao Xia

AP1000 核电项目核岛用桁架臂履带起重机选型分析 ..... 段百齐 张启春 高玉忠 严兆君 (103)  
 Model selection analysis for crawler crane with trussed jib for nuclear island in AP1000 nuclear  
 power project ..... Duan Baiqi, Zhang Qichun, Gao Yuzhong, Yan Zhaojun

群塔防撞自动控制系统无线通讯方式研究 ..... 关 晓 胥洪流 张贞贞 (107)  
 Research on wireless communication for automatic anti-collision control system of group towers  
 ..... Guan Xiao, Xu Hongliu, Zhang Zhenzhen

自动化立体仓库在火力发电厂备件管理中的应用 ..... 王聚德 (109)  
 Application of automatic high-rise warehouse in spare parts management of coal-fired power plant  
 ..... Wang Jude

材料·工艺

船厂门式起重机刚性腿纠偏技术研究 ..... 李 森 钱亮亮 余良辉 (112)  
 Research on rectification technology for rigid leg of shipyard gantry crane  
 ..... Li Sen, Qian Liangliang, Yu Lianghui

齿轮硬刮削工艺在电动葫芦降噪中的应用 ..... 缪晓兰 (116)  
 Application of gear scraping technology in noise reduction of electric hoist ..... Miao Xiaolan

直边对接悬空双面埋弧焊在实际生产中的应用 ..... 沈 寒 李志坤 (120)  
 Application of straight edge butt double-sided submerged arc welding in actual production  
 ..... Shen Han, Li Zhikun

安装·调试

300 t 门式起重机的拆卸方案 ..... 崔慧莲 陆发芹 (122)  
 Dismantling scheme for the 300 t gantry crane ..... Cui Huilian, Lu Faqin

质量·管理

企业物流成本管理精细化 ..... 温香芹 (125)  
 Delicacy management of enterprise logistics cost ..... Wen Xiangqin

安全·检测

门式起重机上翘度的检测和计算 ..... 查继明 (127)  
 Detection and calculation of camber of gantry crane ..... Zha Jiming

技术改造

LS 螺旋输送机的使用问题及解决 ..... 王道宽 杨中华 郝志超 (128)  
 Problems in application and solutions for LS screw conveyer  
 ..... Wang Daokuan, Yang Zhonghua, Hao Zhichao

综合信息

把握智能化发展趋势 装备制造有望“弯道超车” ..... (35)

船用起重机及其他甲板机械未来技术发展趋势 ..... (58)

全自动化轨道起重机和岸桥产品市场需求将进一步提升 ..... (65)

2013 上海国际施工机械、建材机械、矿山机械及专用车辆展览会 ..... (95)

2013 年杂志联合征订 ..... (129)