



工程建设与设计

主办: 国家机械工业局工程建设中心 中国机械工业勘察设计协会 中国中元国际工程公司 CN 11-3914/TU 2013 年第07期 总第303期



中国重汽杭州发动机有限公司
(设计单位: 中国重汽集团设计研究院有限公司)

万方数据

ISSN 1007-9467
9 771007 946103 07 >

05 卷首

阳光新“政”

06 动态资讯**08 特别关注**招标投标走进电子化时代之二：
电子竞争时代的来临**14 走进中国中元**医疗设施发展与创新
——医院设计漫谈（一）**16 世界之旅**

用建筑的眼睛游走世界

20 论坛协同创新、共享资源、
探索合作、促进共赢**大型商业中庭机电消防设计分析****建筑与结构设计**

- 25 德外H地块项目设计（佟一平）
27 高层建筑转换层结构设计（董斌，谷洋，杨颖）
30 大跨度钢筋混凝土平面曲梁分析与设计（孟永杰，郑希明，刘也）
33 西安某小区高层住宅剪力墙结构设计 with 主材指标分析（刘玉杰，齐顺利）
36 启德威尔登酒店结构选型及节点设计（胡奕弟，王云丹，韩建强）
39 无梁楼盖计算及配筋方法探讨（王亚）
42 RC框架填充墙的计算模型探讨（金焕）
45 多层钢结构化工生产厂房结构设计（魏莹）
48 某大跨度重型门式刚架钢结构厂房设计（吴胜发）
51 高炉冶炼中的总图运输设计（杨启哲）
54 钢铁企业改造中总图运输设计问题探讨（范昌梅）
57 低碳时代中国小城镇建设和发展的探索与创新——天津大邱庄镇绿色低碳小城镇建设（徐凤良）
60 新版《混凝土结构设计规范》（GB50010—2010）修订内容整理及分析（杨秋鸣）

基础工程设计

- 63 铸造车间造型线基坑围护工程设计（唐小勇，赵丰，张青山，万叶青）
68 基于midas Civil的基坑锚固结构弹性支点法模拟分析（孔洁，鲁阳）
71 某高炉大修改造工程中几个问题的探讨（刁现伟，刘巍，王若禄，吉永平）
75 马来西亚沙巴地区某工程抗震设计参数研究（朱敏，丹尼斯）
79 土洞及岩溶裂隙破碎带地区地基处理实例（唐红，陈燕俊）
83 静压管桩静载试验分析（张永雨，赵甜）

公用工程设计

- 86 工业锅炉房鼓、引风机的选择与计算（王皓，宋平）
89 武汉地铁体育南路站通风空调设计（胡晓维）
94 10kV变电站综合自动化系统设计（廖玉美）
98 温度监测系统的设计及在屋顶绿化节能效果检测中的应用（王军，韦永斌，后超）
101 基于案例的区域联合集中消防给水系统探讨（陶玉清，杨廷超）
104 消防系统增压稳压装置气压水罐计算方法探讨（周佐辉）
107 太阳能绿色建筑一体化设计（郭文）
109 RCC-II版本差异及其在CPR1000参考电站上的应用（梁博，王帅，陈莉萍）
114 钢结构机械工业厂房管线综合布置（张碧波）
116 WLAN网络建设与在网运营探讨（曹江海）
121 航空货运系统分解/组合区系统设计（寇怡军）

市政·交通·水利工程设计

- 124 桥梁橡胶支座的病害与处理技术研究（王春金）
127 基于认知特性的地铁导向标识系统色彩应用研究（刘姆尔）
130 北京跨军庄铁路T型钢构转体桥设计（刘高锋）
133 检查井对机动车道安全危害的成因及对策（陈玉林）
136 公路沥青路面设计有关问题探讨（梁勇）
138 公路桥涵勘测设计的常见问题与科学合理的勘测设计措施（刘伟）

制造工程设计

- 141 船用凸轮轴成形工艺的数值模拟分析（汪兴，王阳，崔双斌，权国政）
144 手术室控制面板选型及使用分析（董淳）

设计信息化

- 146 如何规划利用好水利信息资源（史赞，张李荪，徐俊）

工程施工技术

- 149 PK预应力混凝土叠合板的抗弯性能研究（黄二位，吕忠琬，马素，侯和涛）
153 使用修复王快速维修损坏的伸缩缝（黄娜）
155 红层软岩填料的工程特性与填筑施工控制（李育权，丰魁）
158 玻璃幕墙工程的质量控制（吕可）
161 论公路路基试验段的施工方案及质量控制（曹仕娟）
163 地下车库的钢筋混凝土裂缝防治实践（宋向东）
166 铁尾矿砂混凝土研究现状（胡现良）

工程项目管理

- 170 FIDIC施工合同条件下的索赔管理（王红军）
173 谈总承包项目的合同拆分（张怡）
175 核电建设工程变更价值模型研究（崔鹏飞）
179 对水利建设工程项目监理招标投标评标方法的探讨（韩群英，宣兆社）
181 中国工程公司的国际市场开发与走出去战略（周志红）
169 勘误



05 FOREWORD

The New "Sunshine Government"

06 INFORMATION

08 SPECIAL FOCUS

Bidding into the Electronic Age:
The electronic era of competition

14 INTO THE IPPR

Development and Innovation of Medical
Facility (I)

16 WORLD VOYAGE

Walk the World with Eyes in Architecture

20 FORUM

Collaborative Innovation, Sharing
Resources, Exploration, and Promote
Win-win Cooperation

The Fire Protection Design of Large-
scale Commercial Building Electrical

Architectural and Structural Design

- 25 Dawai H Plots Project Design (TONG Yi-ping)
- 27 The Design of Transfer Story of High-rise Building (DONG Bin, GU Yang, YANG Ying)
- 30 Analysis and Design on the Big Span Reinforced Concrete Plane Curved Beam (MENG Yong-jie, ZHENG Xi-ming, LIU Ye)
- 33 Analysis of the Structural Design and the Main Material Indicators by a High-rise Residential Shear Wall Structure in Xi'an LIU Yu-jie, QI Shun-li
- 36 Structure Selection and Joint Design of Qideweierdeng Hotel (HU Yi-di, WANG Yun-dan, HAN Jan-qiang)
- 39 Discussion on the Calculation and Reinforcement Methods of the Slab-column System (WANG Ya)
- 42 Study on the Calculation Model of Masonry-Infilled RC Frame (JIN Huan)
- 45 The Structural Design of Multi-story Steel Structure Petrochemical Process Building (WEI Ying)
- 48 Design of a Large Span and Heavy Portal Frame Steel Structure Workshop (WU Sheng-fa)
- 51 The General Layout and Transportation Design of Blast Furnace Smelting Process (YANG Qi-zhe)
- 54 Iron and Steel Enterprise Reform in Design of General Layout and Transportation Problems (FAN Chang-mei)
- 57 Exploring and Innovation of Small Town Development in China in Low Carbon Time—Construction of Low Carbon and Green Town for Daqizhuang, Tianjin (XU Feng-liang)
- 60 Classification and Analysis of the Revision Content in New Edition of <Code for Design of Concrete Structure> (GB50010—2010) (YANG Qiu-ming)

Engineering Design of the Ground

- 63 Foundry Moulding Line Foundation Pit Support Engineering (TANG Xiao-yong, ZHAO Feng, ZHANG Qing-shan, WANG Ye-qing)
- 68 Elastic-reaction Method Simulation Analysis of Foundation Pit Support Structure Based on Midas Civil (KONG Jie, LU Yang)
- 71 Discussing the Problems about Blast Furnace Renovation Works (DIAO Xian-wei, LIU Wei, WANG Yan-lu, JI Yong-ping)
- 75 Study on Seismic Design Parameters of a Project in Sabah Malaysia (ZHU Min, DENNIS KUEH)
- 79 A Foundation Case Treatment Instance in the Region Where Existing Soil Holes and Karst Fissure Broken Belts (TANG Hong, CHEN Yan-jun)
- 83 Analysis on Static Loading Test of Static Pressure Pipe Piles (ZHANG Yong-yu, ZHAO Tian)

Public Utilities Design

- 86 Selection and Calculation of Air Blower and Induced Draft of Industrial Boiler Room (WANG Hao, SONG Ping)
- 89 HVAC Design for Wuhan Sports Road Subway Station (HU Xiao-wei)
- 94 The Total Automation System Design of a 10kV-Substation (LIAO Yu-mei)
- 98 Design and Implementation of Temperature Monitoring System and the Application the Energy-saving Effect Measurement of the Green Roof (WANG Jun, WEI Yong-bin, HOU Chao)
- 101 The Discussion of Regional Centralized Fire Water Supply System (TAO Yu-qing, YANG Ting-chao)
- 104 Discussion on the Calculation Method of Pressure Tank in Fire Control System (ZHOU Zuo-hui)
- 107 Integrated Design of Solar Green Building (GUO Wen)
- 109 Differences Between RCC-I Editions and the Application in CPR1000 (LIANG Bo, WANG Shuai, CHEN Li-ping)
- 114 The Pipeline Arrangement of the Steel Structure Machinery Workshop (ZHANG Bi-bo)
- 116 Probe into WLAN Network Construction and Network Operators (CAO Jiang-hai)
- 121 The System Design of Air Cargo System Decomposition/Combination Area (KOU Yi-jun)

Municipal · Traffic · Water Resources Engineering Design

- 124 The Disease of Bridge Rubber Bearing and Processing Technology Research (WANG Chun-jin)
- 126 Application Research on Color Design of the Subway Indicator System Based on Cognitive Characteristic (LIU Ting-er)
- 130 Design of the Rotational Structure of Beijing Junzhuang Railway T-shape Rigid Frame Horizontal-rotational Bridge (LIU Gao-feng)
- 133 The Causes and Countermeasures of the Damage that Manholes make to the Vehicle Safety (CHEN Yu-lin)
- 136 Discussion on Some Problems of Design of Highway Asphalt Pavement (LIANG Yong)
- 138 Common Problems in the Highway Bridge Survey and Design and Scientific Survey and Design Measures (LIU Wei)

Manufacture Engineering Design

- 141 The Numerical Simulation of Marine Camshaft Forming Process (WANG Xing, WANG Yang, CUI Shuang-bin, QUAN Guo-zheng)
- 144 Selection and Use of Analytical Control Panel in the Operating Room (DONG Chun)

Information Design

- 146 How to Plan to Make Good Use of Water Conservancy Information Resources (SHI Yun, ZHANG Li-sun, XU Jun)

Construction Technology

- 149 Study on the Flexural Behavior of PK Prestressed Concrete Composite Slab (HUANG Er-wei, LV Zhong-long, MA Su, HOU He-tao)
- 153 Rapid Repairment of Damaged Expansion Joints with Restoration King (HUANG Na)
- 155 The Engineering Properties of Soft Red Layer Stuffing and its Construction Control (LI Yu-shu, FENG Su)
- 158 Quality Control of the Glass Curtain Wall Engineering (LV ke)
- 161 Construction Scheme and Quality Control of Highway Subgrade Test Sections (CAO Shi-juan)
- 163 Crack Control Practice of Reinforced Concrete Underground Garage (SONG Xiang-dong)
- 166 The Research Status of Concrete Prepared with Ferrous Mill Tailings as Manufactured Fine Aggregates (HU Xian-liang)

Project Management

- 170 Claim Management under the Conditions of FIDIC Construction Contract (WANG Hong-jun)
- 173 Brief Analysis of Breaking up the EPC Contract (ZHANG Yi)
- 175 Analysis of Engineering Changes Value Model in Nuclear Power Plant Project (CUI Peng-fei)
- 179 Discussion on Methods for Assessing Bidding of Surveillance Management in Hydraulic Projects (HAN Qun-ying, XUAN Zhao-she)
- 181 Development of International Market and Going-out Strategy of Chinese Engineering Corporations (ZHOU Zhi-hong)
- 169 Corrigendum