



# 工程建设与设计

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11期 总第307期



中国国际贸易中心三期A阶段

(监理单位:北京兴电国际工程管理有限公司)

ISSN 1007-9467



9 771007 946103



**05 卷首****追求卓越 心系未来****06 动态资讯****08 特别关注****矢志不渝 坚守承诺**

——《工程建设与设计》杂志创刊60周年回顾

**建筑与结构设计**

- 25** 现代大型机械工业厂房的建筑设计思路（于杰，徐德芳，龚政）
- 28** 某重工厂结构件车间工艺设计（马闯，史倩，陈庆忠，张平安）
- 30** 新老建筑的和谐共生——大连市省级数据处理中心及监测实验用房设计（黄本良，李长松，陆超，张磊）
- 34** 地下车库设计策略（孙明宝）
- 40** 碳纤维加固混凝土抗弯构件的理论研究及MATLAB-GUI设计（李威，张丽娜，余祥，崔鹏飞，李凤臣，徐红宾，万里阳）
- 44** 高层工业与民用建筑剪力墙设计（郭庆伟）
- 48** 谈对大学校园景观场所精神的还原（谢月）
- 52** 钢筋混凝土仿木构建筑结构设计及施工技术（王巍）
- 54** 钢-高强混凝土组合梁抗弯承载力分析（肖良丽，潘明杨）
- 57** 某软土地区六层住宅楼及其裙房纠偏加固与监测（徐正来）
- 60** 融雪剂搅拌站工艺设计探讨（李利，王春普，杜鹏，张云涛）

**基础工程设计**

- 64** 单管塔扩底基础反力探讨（屠海明）
- 67** 填海地层振动碎石桩的有限元分析（刘玉恒，周杰，赵志涛）
- 70** 岩体锚固技术的锚固机理分析及锚固质量控制（蔡宁，宋国芳）

**公用工程设计**

- 73** 从城市发展角度探讨城市滨水地区旅游开发（柴洁）
- 76** 国际长输天然气管道工程建设——以中乌项目为例（刘杰）
- 79** 现代建筑遮阳设计探讨（赵齐，金鑫）
- 83** GPS技术在管道伴行路测量中的应用（吕红涛，赵鹏飞，寇明明）
- 85** 新风系统的开发和利用（李彩霞，杨建新）
- 88** 协同平台上综合管线设计软件开发探讨（马业伟）
- 90** 热电联产的节能环保应用分析（马志远）

**市政·交通·水利工程建设**

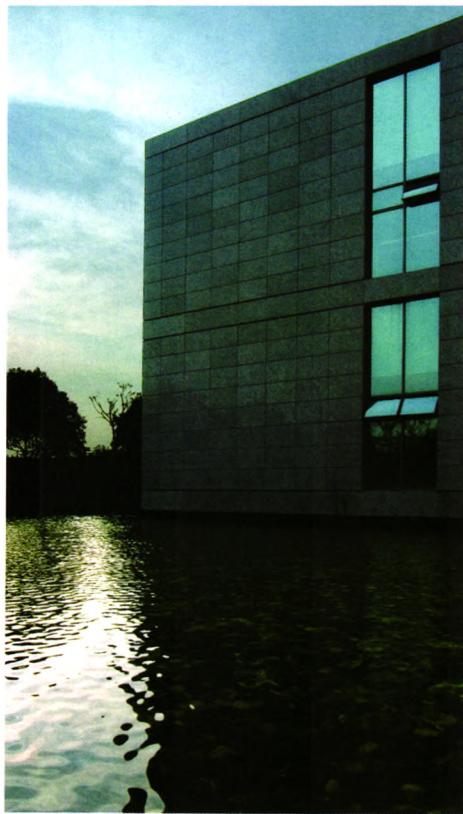
- 93** 富水砂层超浅埋暗挖大跨隧道防坍和限沉技术（廖景）
- 97** CASIOfx-5800P计算线路中边桩坐标的通用程序（张冬菊，彭华）
- 101** 道岔后缩短连接曲线的自动绘制（李勤）
- 104** 避险车道设计及存在问题的分析（郭永谊）

**工程施工技术**

- 108** AP1000核岛底板大体积混凝土裂缝控制研究（戴德时，黄本良，张磊）
- 112** AP1000长管道模块吊装吊点的优化选择（俞剑江）
- 115** 铁路工程预制现场的成本控制措施（姜岩）
- 118** 混凝土建筑结构的检测与加固技术研究（李志国，王岚兰）
- 120** 水网地段大口径输水管网施工方法的研究（许怀丽）
- 123** 论给排水管道施工质量控制（赖红波）

**工程项目管理**

- 126** 水利水电工程招标管理问题及对策（郑修军）
- 129** 费率招标法在工程施工招标中的应用（王红兵，葛梦良，王娟）
- 132** 议工程量清单计价在火力发电工程招投标中的应用（何佳培）
- 135** 大型化工项目建设的再实践再思考（周夏，邹宇飞，张健）
- 139** 论大型石油石化建设项目设计的全过程管理方法（陈宇）
- 47** 勘误



## 05 FOREWORD

The Pursuit of Excellence Heart on Future

## 06 INFORMATION

## 08 SPECIAL FOCUS

Maintain Our Commitment

### Architectural and Structural Design

- 25 The Architecture Design Ideas of Modern Large Machinery Industrial Plant(YU Jie, XU De-fang, GONG Zheng)
- 28 Process Design of Structure Workshop for A Heavy Plant(MA Chuang, SHI Qian, CHEN Qing-zhong, ZHANG Ping-an)
- 30 Harmonious Coexistence of Old and New Buildings ——The Provincial Data reduction Center and Housing for Experiments in Monitoring Design of Dalian City(HUANG Ben-liang, LI Chang-song, LU Chao, ZHANG Lei)
- 34 Underground Garage Design Strategy (SUN Ming-bao)
- 40 Theoretical Study of Carbon Fiber Reinforced Concrete Flexural Members and MATLAB-GUI Design (LI Wei, ZHANG Li-na, YU Xiang, CUI Peng-fei, LI Feng-chen, XU Hongbin, WAN Li-yang)
- 44 Top Industrial and Civil Building Shear force Wall Design (GUO Qing-wei)
- 48 Study on How to Restore the Sence of Campus Landscape(XIE Yue)
- 52 Design and Construction of the Wooden Construction Buildings of Reinforced Concrete Structure (WANG Wei)
- 54 Flexural Bearing Capacity Analysis of Composite Stell-HSC Beams(XIAO Liang-li, PAN Ming-yang)
- 57 Tilting Correction Reinforcement and Monitoring of a 6-Story Residential Building and Its Skirt Structure on Soft Soil (XU Zheng-lai)
- 60 Discussion on the Process Design for the Deicing Salt Mixing Station(LI Li, WANG Chun-pu, DU Juan, ZHANG Yun-tao)

### Engineering Design of the Ground

- 64 Discussion on the Foundation Reaction of Spread Foundation of Monopole (TU Hai-ming)
- 67 The Finite Element Analysis of Vibroflotation Gravel Pile in Coastal Reclamation Layers(LIU Yu-heng, ZHOU Jie, ZHAO Zhi-tao)
- 70 Rock Anchorage Technology Anchorage Mechanism Analysis and Anchorage Quality Contro (CAI Ning, SONG Guo-fang)

### Public Utilities Design

- 73 Urban Waterfront Tourism DevelopmentFrom the Perspective of Urban Development (CHAI Jie)
- 76 International Long-Distance Gas Pipeline Construction ——China-Uzbekistan Project as Example (LIU Jie)
- 79 Discussion on Design of Modern Architecture Shade (ZHAO Qi, JIN Xin)
- 83 Application of GPS Technology in the Measurement of the Paralelling Road to Pipeline (LV Hong-tao, ZHAO Peng-fei, KOU Ming-ming)
- 85 Development and Utilization of Fresh Air System (LI Cai-xia, YANG Jian-xin)
- 88 Discuss Integrated Pipelines Design Software Development on Collaborative Platform(MA Ye-wei)
- 91 Energy Conservation and Environmental Protection Applications Analysis of the Combined Heat and Power (MA Zhi-yuan)

### Municipal · Traffic · Water Resources Engineering Design

- 93 Collapse and Settlement Prevention Technology of Large Span Tunnel Under the Condition of Water-rich Stratum in Shallow Buried Excavation (LIAO Jing)
- 97 CASIOfx-5800P Calculated Line Side Coordinates General Program (ZHANG Dong-ju, PENG Hua)
- 101 Automatic Drawing of Shorten Connecting Curve Behind Turnout(LI Jie)
- 104 Emergency Lane Design and Problems Analysis(GUO Yong-yi)

### Construction Technology

- 108 Research on the Mass Concrete Crack Control of AP1000 nuclear Island Basemat(DAI De-shi, HUANG Ben-liang, ZHANG Lei)
- 112 The Methods of Optimal Selection of Lifting Points of AP 1000 Long Pipe Modules (YU Jian-jiang)
- 115 Railway Engineering Cost Control Measures of Prefabricated Field(JIANG Yan)
- 118 Detection and Reinforcement of Concrete Building Structures Technology Research(LI Zhi-guo, WANG Lan-lan)
- 120 Research on Water Pipe Construction Method in the Water Channel Area (XU Huai-li)
- 123 On to the Supply and Drainage Construction Quality Control (LAI Hong-bo)

### Project Management

- 126 Water Conservancy and Hydropower Project Bidding Management Problems and Countermeasures (ZHENG Xiu-jun)
- 129 The Application of Rate Bidding Method in Engineering Construction Bidding(WANG Hong-bing, GE Meng-liang, WANG Juan)
- 132 Discussion on Aplication of Bill of Quantities Valuation in Thermal Power Project Bidding (HE Jia-pei)
- 135 Further Practice and Thinking of Large-scale Chemical Projects Construction(ZHOU Xia, HUAN Yu-fei, ZHANG Jian)
- 139 The Entire Process of Design Management for Large-scale Petroleum & Petrochemical Projects(CHEN Yu)
- 47 Corrigendum