

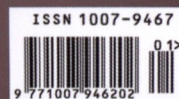


工程建设与设计

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 中国中元国际工程有限公司 CN 11-3914/TU 2020 年第01月上 总第423期



北京炎黄联合国际工程设计有限公司(YHIA)
商业设计总经理 陈松
万方数据



动态资讯

- 01 “国务院下调基建项目最低资本金比例”等信息8则

信息化

- 03 《设计质量措施研究》课题成果验收会召开

封面人物

- 04 陈松: 荟萃国际商业时尚 描绘建筑文化魅力

论坛

- 06 中美注册建筑师考试大纲对比分析与研究

建筑与结构设计

- 11 高层钢框架屈曲约束支撑结构设计要点
(刘正雄, 郑希明)
- 15 船厂站房建筑设计探讨(段晓星)
- 18 某高层建筑的结构设计(周戈梅)
- 21 预制装配式清水混凝土站台柱雨棚研究(王欣)
- 23 钢框架结构设计的相关要点(马智英, 路平)
- 28 适老化住宅室内设计分析(李丹)
- 33 结构加固和防渗漏技术在既有建筑改造中的应用
(徐承鹏)
- 35 宜春市润达国际广场结构设计与分析(王生)
- 38 住宅地暖的精细化设计探讨(杨鹏, 侯静)
- 41 济南西客站大型屋盖滑移控制技术分析
(王培森, 路鹏)

基础工程设计

- 44 椿芽树沟潜在泥石流流动力学特征及防治工程探讨
(满兵)
- 47 深基坑周边建(构)筑物沉降分析与控制技术
(徐启鹏, 王玥)
- 52 地铁隧道明挖法施工基坑支护稳定性探讨(汪想贵)
- 55 采空区勘察物探技术应用研究(董全文)
- 57 基于地质雷达探测的施工对相邻建筑物影响分析
(刘金龙, 浦琛琛, 袁小军, 毛东建)
- 61 某双曲线冷却塔有限元分析与设计(许茜, 王士奇)

- 66 软土地区直埋管与架管方案设计及对比分析
(何剑平, 李威, 郑建建)

公用工程设计

- 70 民用建筑节能设计(朱璇)
- 72 MJS工法在现有管线保护中的应用(张坤)
- 75 建筑环境的灯光照明设计(赵天硕)
- 78 中央空调系统方案的设计与节能分析(袁堂钦)
- 80 地下车库通风系统设计(崔鹏波)
- 83 工业园区的智能用电设计探讨——以渠江云谷为例
(李文兴, 鲁鹏)
- 86 关于消防泵房内消防环网上泄压阀取值探讨(郑超)

市政·交通·水利工程设计

- 89 河北某造车基地给水排水设计(李兴海)
- 92 复杂地质环境下山岭隧道监控量测技术研究
(姚士磊, 何伟)
- 95 无人机摄影测量与RTK在水运工程中应用研究(魏小明)
- 98 某市A区域道路节点提升方案研究(谢瑾荣, 吴正新)
- 100 市政给排水规划与设计中的常见问题分析(吴兴江)
- 103 复杂山岭重丘区高速公路桥梁工程穿越国家公益林施工便道选线方案探讨(张春梅)
- 106 地铁车站与商业建筑结合设置经验探讨
(刘敏, 周俊涛, 吴根平)
- 108 天水籍河流域泥岩动力学特性的试验研究(车福东)
- 111 园林植物在海绵城市建设中的选择与应用
(杨绪莲, 柴艳龙)
- 114 复杂环境地质条件下隧洞进口段支护设计
(刘岭楠, 王晗)
- 117 小间距高速铁路隧道群设计技术(王旭)
- 121 沿海地区消石灰对沥青路面性能影响的研究(郑雪冰)
- 123 铁路箱梁预制梁场建设的优化方案(刘蔚林)
- 126 平台小车的关键技术与应用(衡超, 张铮)
- 128 高速公路隧道照明标准的对比分析(冯涛)
- 131 隧道洞口边坡组合式支护结构设计及性能研究
(杨鉴波, 周晓东)
- 134 水利水电工程施工中边坡开挖支护技术的应用分析
(普正宏, 高伟)
- 136 论既有电缆排摸方法(耿占权)
- 139 长距离输水管设计要点探讨(张睿)
- 142 双悦岭隧道反坡排水施工方案(任惠翔)
- 145 混凝土结构桥梁的耐久性设计问题分析(李渊)
- 147 斜桥在南水北调东线工程中的应用分析
(王爽, 张志超)
- 149 取消高速公路省界收费站ETC门架系统RSU天线冗余设置研究(李奇峰)
- 153 分析公路建设中试验检测技术的应用(张宁宁)

155 多源数据视角下职住平衡与公交服务一致性研究——以广州市为例 (张海林)

159 管廊内热力和空调管道支架研究 (陈贇, 朱璇)

工业工程设计

162 固定管板式换热器应力分析 (钱路燕, 贺斌兰, 万雷)

165 高海拔地区成品油扫舱装置设计 (吴林虎)

168 电机工厂智能制造评价指标及评估方法探讨 (夏显超, 江涛, 龙罡)

171 起重机械的故障诊断与检验检测 (栾昌和)

173 电子器件自动装配线技术研究 (陈贵樟, 杨晨, 叶冬, 马吉军, 黄建根, 蒋宇鹏)

环境工程设计

175 焊接车间烟尘处理技术探讨 (马闯, 康凯, 滕纪云, 胡章枝)

178 细胞型多效能海绵湿地植物景观的构建 (马晓雨)

180 建筑固体废弃物移动破碎利用技术研究 (郭永平, 刘涛)

智能与信息化

183 信息化在海外建筑工程管理中的应用及发展 (秦昊)

185 基于中心逼近式的GM(1, 1)模型在变形预测中的应用 (江春建)

188 探析无人机遥感技术在测绘工程测量中的应用 (祖琪)

190 BIM技术在某工程幕墙施工阶段的应用研究 (寇永聪, 刘晓芳, 吴海辉, 李享)

193 基于SPSS的电力工程造价BIM技术的体现 (卢凯)

196 海外项目现场咨询管理参考 (刘金海)

198 粮仓建筑气密性预测软件的开发 (郭治洪, 童沪琨, 张梦歌, 刘震华, 李建平, 陈光中)

工程施工技术

202 装配式叠合双向板受力性能实验研究及分析 (计策)

205 基于连续梁挂篮施工在铁路桥梁建设中的应用分析 (贺凯)

207 公路桥梁施工中挂篮悬浇施工应用技术 (唐绍华, 王伟风, 李麒)

209 市域轨道交通地下线自密实混凝土灌注施工技术 (曹学农)

213 水泥稳定碎石基层的裂缝成因分析与防治对策 (邵鹏, 何艾雨)

216 体外预应力技术在桥梁加固工程中的应用研究 (王伟东)

218 乐山至沙湾城际生态大道一号桥连续梁施工技术 (曹辉, 蔡伟)

221 路桥工程建设中的预应力施工技术 (闫海)

223 大跨径连续刚构桥梁建设中的混合修正施工技术 (周丽东)

226 香港节段梁预制施工技术 (崔瑞田)

229 龙浦大桥施工过程仿真模拟与监控分析 (吴文锦, 许涛)

231 公路沥青路面施工现场试验检测技术 (曹霞)

234 预应力钢绞线薄壁空心方桩在长台座上的运用探析 (单颖涛, 朱春山)

236 混凝土结构裂缝修复施工技术 (张彪)

239 受限空间超宽变截面现浇箱梁施工技术 (陈龙, 史卫)

242 临近既有铁路桥梁桩基施工技术 (庄多钦)

244 高速公路分离式立交桥的钢-混组合箱梁施工研究 (张永辉)

247 微膨胀混凝土在预制拼装箱梁湿接缝中的应用研究 (李兴华)

249 道路填方段软弱地基施工技术 (刘凯斌)

251 非洲地区铁路路基施工技术优化策略 (赵亮)

254 CO₂气体保护焊单面焊双面成形焊接技术研究 (杨家雷)

257 装配式施工技术在住宅工程中的应用 (吴宪)

259 基于清华大学汽研所电池安全实验室室内装修改造的体会 (王宇, 宋小伟)

262 建筑给排水设计中环保材料、设备及工艺的应用研究 (余斌)

264 桥梁墩柱盖梁一体化施工技术研究 (王晓利, 张金生, 李凤贤, 杨延柯)

267 软弱围岩隧道变形段单侧壁导坑施工技术研究 (税伟)

工程项目管理

269 高品质快速开发下的景观工程品控精细化管理——以华润置地华东大区景观品控体系建设为例 (余昊翰)

274 原油管道聚氨酯泡沫、防水帽采购与加工问题探讨 (张学, 纪军)

277 高速公路机电系统维护维修与管理分析 (张栋, 贾晓虎)

280 招投标过程中存在的问题及应对策略 (廖立宪)

283 降低城市污水处理厂工程造价的应用研究 (左红艳)

285 国际工程中新加坡施工总承包合同项目分析 (唐维宁)

288 政府投资项目超概算及调整措施 (刘一浩)

290 桥梁项目施工质量管理的措施分析 (叶俊鹏)

293 阿布扎比工程建设项目报批流程探析 (张怡帆)

296 道路施工项目成本控制及应用研究 (余拥华)

298 公路工程质量监督管理中精细化管理模式的应用 (满伟)

301 市政工程安全文明施工管理方法 (张永生)

303 建筑工程中施工组织设计优化及成本控制研究 (卓东强)

306 北方地区冬季寒冷气候条件下低影响开发雨水设施设计及维护管理的关键问题分析——以济南鲁能领秀城为例 (王崇艺, 张鹏, 朱崇文, 崔永顺)

308 加强市政公用工程施工安全监督管理策略 (李建兵)

INFORMATION

- 01 "The State Council Reduces the Minimum Capital Ratio of Infrastructure Projects" Etc. 8

INFORMATIZATION

- 03 "Design Quality Measures Research" Project Results Acceptance Meeting Held

COVER PERSON

- 04 Gathering International Commercial Fashion to Depict the Charm of Architectural Culture

FORUM

- 06 Comparative Analysis and Research Between American and Chinese Registered Architect Examination Syllabus

Architectural and Structural Design

- 11 Main Points for Design of High-Rise Steel Frame Structure with Buckling Restrained Brace (LIU Zheng-xiong, ZHENG Xi-ming)
 15 Discussion on the Design of Shipyard Station Building (DUAN Xiao-xing)
 18 Structural Design of a High-Rise Building (ZHOU Ge-mei)
 21 Study on Prefabricated Fair-Faced Concrete Platform Column Canopy (WANG Xin)
 23 Key Points in Steel Frame Structure Design (MA Zhi-ying, LU Ping)
 28 Analysis on the Elderly-Oriented Residential Interior Design (LI Dan)
 33 Application of Structural Reinforcement and Leakage-Proof Technology in Rebuilding of Existing Buildings (XU Cheng-peng)
 35 Structural Design and Analysis of Yichun Runda International Plaza (WANG Sheng)
 38 Discussion on the Fine Design of Residential Ground Heating (YANG Peng, HOU Jing)
 41 Analysis on Sliding Control Technology for Large Roof of Ji'nan West Railway Station (WANG Pei-sen, LU Peng)

Engineering Design of the Ground

- 44 Dynamic Characteristics and Control Engineering of Chunyashu Potential Debris Flow (MAN Bing)
 47 Settlement Analysis and Control Technology of Deep Foundation Pits and Its Surrounding Buildings (XU Qi-peng, WANG Yue)
 52 Discussion on the Stability of Foundation Pit Support in Open-Cut Construction of Subway Tunnel (WANG Xiang-gui)
 55 Study on the Application of Geophysical Prospecting Technology in Gof Survey (DONG Quan-wen)
 57 Influence Analysis of Construction on Adjacent Buildings Based on GPR Detection (LIU Jin-long, PU Chen-chen, YUAN Xiao-jun, MAO Dong-jian)
 61 Finite Element Analysis and Design of a Hyperbolic Cooling Tower (XU Qian, WANG Shi-qi)
 66 Design and Comparative Analysis of Direct-Buried Pipe and Pipeline Support Scheme in Soft Soil Area (HE Jian-ping, LI Wei, ZHENG Jian-jian)

Public Utilities Design

- 70 The Design of Civil Architecture Water Saving (ZHU Xuan)
 72 Application of MJS Method in the Existing Pipelines Protection (ZHANG Kun)
 75 Lighting Design for the Building Environment (ZHAO Tian-shuo)
 78 Design and Energy Saving Analysis of Central Air Conditioning System (YUAN Tang-qin)
 80 The Design of Ventilation System for Underground Garage (CUI Peng-bo)
 83 Discussion on Intelligent Electricity Design of Industrial Park—Taking Qujiang Cloud Valley as an Example (LI Wen-xing, LU Peng)
 86 Discussion on the Value of Pressure Relief Valve on Fire Ring Network in Fire Pump Room (ZHENG Chao)

Municipal Traffic Water Resources Engineering Design

- 89 Water Supply and Drainage Design of a Car Manufacturing Base in Hebei Province (LI Xing-hai)
 92 Study on Monitoring and Measuring Technology of Mountain Tunnel in Complex Geological Environment (YAO Shi-lei, HE Wei)
 95 Application Research of UAV Photogrammetry and RTK in Water Transportation Engineering (WEI Xiao-ming)
 98 Study on the Upgrading Scheme of Road Node in Area A of a City (XIE Jin-rong, WU Zheng-xin)
 100 Analysis of Common Problems in Municipal Water Supply and Drainage Planning and Design (WU Xing-jiang)
 103 Discussion on Line Selection Scheme of Expressway Bridge Project Passing Through National Public Welfare Forest Construction Sidewalk in Complex Mountain Heavy Hilly Area (ZHANG Chun-mei)
 106 Discussion on the Combination Experience of Subway Station and Commercial Building (LIU Min, ZHOU Jun-tao, WU Gen-ping)
 108 Experimental Study on Mudstone Dynamic Characteristics in the Xihe River Basin, Tianshui (CHE Fu-dong)
 111 Selection and Application of Garden Plants in Sponge City Construction (YANG Xu-lian, CHAI Yan-long)
 114 Support Design of Tunnel Entrance Section Under Complex Environmental Geological Conditions (LIU Ling-nan, WANG Han)
 117 Design Technology of High-Speed Railway Tunnel with Small Spacing (WANG Xu)
 121 Study on the Effect of Hydrated Lime on Asphalt Pavement Performance in Coastal Areas (ZHENG Xue-bing)
 123 Optimization Scheme of Railway Box Girder Prefabrication Yard Construction (LIU Wei-lin)
 126 Key Technology and Application of Platform Car (HENG Chao, ZHANG Zheng)
 128 Comparative Analysis of Highway Tunnel Lighting Standards (FENG Tao)
 131 Design and Performance Study of Composite Support Structure for Tunnel Entrance Slope (YANG Jian-bo, ZHOU Xiao-dong)
 134 Application Analysis of Slope Excavation Support Technology in Construction of Water Conservancy and Hydropower Projects (PU Zheng-hong, GAO Wei)
 136 Discussion on Existing Cable Arrangement Method (GENG Zhan-quan)
 139 Discussion on Key Design Points of Long Distance Water Pipeline (ZHANG Rui)
 142 Shuangyueling Tunnel Anti-Slope Drainage Construction Scheme (REN Hui-xiang)
 145 Analysis on Durability Design of Concrete Structure Bridges (LI Yuan)
 147 Application Analysis of Skew Bridge in the Eastern Route of South-to-North Water Transfer Project (WANG Shuang, ZHANG Zhi-chao)
 149 Research on Eliminating RSU Antenna Redundancy in ETC Gantry System of Expressway Toll Station (LI Qi-feng)
 153 Analysis of the Application of Test Detection Technology in Highway Construction (ZHANG Ning-ning)
 155 Research on Job-Residence Balance and Public Transport Service Consistency from the Perspective of Multi-Source Data—Taking Guangzhou as an Example (ZHANG Hai-lin)

- 159 Discussion on Heat and Air Conditioning Pipe Supports in Pipe Gallery (CHEN Yun, ZHU Xuan)

Industrial Engineering Design

- 162 Stress Analysis of the Fixed Tube-Plate Heat Exchanger (QIAN Lu-yun, HE Bin-lan, WAN Lei)
- 165 Design of Cabin Sweeping Device for Oil Products in High Altitude Areas (WU Lin-hu)
- 168 Discussion on Evaluation Index and Method of Intelligent Manufacturing in Motor Factory (XIA Xian-chao, JIANG Tao, LONG Gang)
- 171 Fault Diagnosis and Inspection of Lifting Machinery (LUAN Chang-he)
- 173 Research on Automatic Assembly Pipeline Technology of Electronic Components (CHEN Gui-zhang, YANG Chen, YE Dong, MA Ji-jun, HUANG Jian-gen, JIANG Yu-peng)

Environment Engineering Design

- 175 Discussion on the Fume Treatment Technology in the Welding Workshop (MA Chuang, KANG Kai, TENG Ji-yun, HU Zhang-zhi)
- 178 Construction of Cell Type Multi-Effect Sponge Wetland Plant Landscape (MA Xiao-yu)
- 180 Research on Mobile Crushing and Utilization Technology of Building Solid Waste (GUO Yong-ping, LIU Tao)

Intelligentize and Informatization

- 183 Application and Development of Informatization in Overseas Construction Engineering Management (QIN Hao)
- 185 Application of GM (1,1) Model Based on Center Approach in Deformation Prediction (JIANG Chun-jian)
- 188 Analysis on the Application of UAV Remote Sensing Technology in Surveying and Mapping Engineering Survey (ZU Qi)
- 190 Application Research of BIM Technology in the Construction Stage of a Project Curtain Wall (KOU Yong-cong, LIU Xiao-fang, WU Hai-hui, LI Xiang)
- 193 The Embodiment of BIM Technology for Power Engineering Cost Based on SPSS (LU Kai)
- 196 Reference for Site Consulting Management of Overseas Projects (LIU Jin-hai)
- 198 Development of Granary Airtightness Prediction Software (GUO Zhi-hong, TONG Hu-kun, ZHANG Meng-ge, LIU Zhen-hua, LI Jian-ping, CHEN Guang-zhong)

Construction Technology

- 202 Study and Analysis of Mechanical Properties Experiment in the Assembly-Type Superimposed Two-Way Slabs (JI Ce)
- 205 Application Analysis of Continuous Beam Hanging Basket Construction in Railway Bridge Construction (HE Kai)
- 207 Application Technology of Hanging Basket Hanging Pouring Construction in Highway Bridge Construction (TANG Shao-hua, WANG Wei-feng, LI Qi)
- 209 Construction Technology of Self-Compacting Concrete Perfusion in Urban Metro Underground Line (CAO Xue-nong)
- 213 Cause Analysis and Prevention Countermeasures of Crack in Cement Stabilized Macadam Base (SHAO Peng, HE Ai-yu)
- 216 Study on the Application of External Prestressing Technology in Bridge Reinforcement Engineering (WANG Wei-dong)
- 218 Continuous Beam Construction Technology of No.1 Bridge of Ecological Avenue Between Leshan and Shawan (CAO Hui, CAI Wei)
- 221 Prestressed Construction Technology in Road and Bridge Construction (YAN Hai)
- 223 The Construction Technology of Mixed Correction in the Construction of Long Span Continuous Rigid Frame Bridge (ZHOU Li-dong)
- 226 Precast Construction Technology for Segmental Beams in Hong Kong (CUI Rui-tian)
- 229 Simulation and Monitoring Analysis of Longpu Bridge Construction Process (WU Wen-jin, XU Tao)

- 231 Field Test and Inspection Technology for Highway Asphalt Pavement Construction (CAO Xia)
- 234 Application Analysis on the Prestressed Steel Strand Thin-Walled Hollow Square Pile on Long Pedestal (SHAN Ying-tao, ZHU Chun-shan)
- 236 Construction Technology of Concrete Structure Crack Repair (ZHANG Biao)
- 239 Construction Technology of Cast-in-Place Box Girder with Super-Wide Variable Section in Restricted Space (CHEN Long, SHI Wei)
- 242 Pile Foundation Construction Technology of Adjacent Existing Railway Bridge (ZHUANG Duo-yu)
- 244 Research on Steel-Concrete Composite Box Girder Construction of Expressway Separated Overpass (ZHANG Yong-hui)
- 247 Application Study on the Micro Expansion Concrete in the Wet Joint of Prefabricated Box Girder (LI Xing-hua)
- 249 Construction Technology of Soft Foundation in Road Fill Section (LIU Kai-bin)
- 251 Optimization Strategy of Railway Roadbed Construction Technology in Africa (ZHAO Liang)
- 254 Research on CO₂ Gas Shielding Welding Technology of One-Sided Welding and Two-Sided Forming (YANG Jia-lei)
- 257 Application of Assembled Construction Technology in Residential Engineering (WU Xian)
- 259 Experience of Interior Decoration Renovation Based on Battery Safety Laboratory of Tsinghua University (WANG Yu, SONG Xiao-wei)
- 262 Application Research on Environmental Protection Materials, Equipment and Technology in Building Water Supply and Drainage Design (YU Bin)
- 264 Research on Integrated Construction Technology of Bridge Pier Column and Cover Beam (WANG Xiao-li, ZHANG Jin-sheng, LI Feng-xian, YANG Yan-ke)
- 267 Research on Construction Technology of Single Side Guide Pit in Deformation Section of Soft Surrounding Rock Tunnel (SHUI Wei)

Project Management

- 269 Fine Management of Landscape Engineering Quality Control Under High Quality and Rapid Development—Taking the Construction of Landscape Quality Control System of China Resources Land in East China as an Example (YU Hao-han)
- 274 Discussion on Purchase and Processing of Polyurethane Foam and Waterproof Cap for Crude Oil Pipeline (ZHANG Xue, JI Jun)
- 277 Analysis of Maintenance and Management of High Speed Electromechanical System (ZHANG Dong, JIA Xiao-hu)
- 280 Problems and Countermeasures in the Bidding Process (LIAO Li-xian)
- 283 Application Research on Reducing the Project Cost of Urban Sewage Treatment Plant (ZUO Hong-yan)
- 285 Analysis of Singapore Construction General Contracting Project in International Engineering (TANG Wei-ning)
- 288 Government Investment Projects Exceed Budget Estimates and Adjustment Measures (LIU Yi-hao)
- 290 Measure Analysis of Bridge Construction Quality Management (YE Jun-peng)
- 293 Analysis on the Approval Process of Abu Dhabi Engineering Construction Project (ZHANG Yi-fan)
- 296 Research on Cost Control and Application of Road Construction Projects (YU Yong-hua)
- 298 Application of Fine Management Mode in Quality Supervision and Management of Highway Engineering (MAN Wei)
- 301 Safe and Civilized Construction Management Method of Municipal Engineering (ZHANG Yong-sheng)
- 303 Study on Construction Organization Design Optimization and Cost Control in Construction Engineering (ZHUO Dong-qiang)
- 306 Analysis of Key Problems in Design and Maintenance Management of LID Rainwater Facilities for Winter Cold Weather in the Norths—Taking Ji'nan Luneng Lingxiu City as an Example (WANG Chong-yi, ZHANG Peng, ZHU Chong-wen, CUI Yong-shun)
- 308 Strengthening Construction Safety Supervision and Management Strategy of Municipal Public Engineering (LI Jian-bing)

