

中国核心期刊（遴选）数据库 收录期刊

Value Engineering

中国商界文联 会刊

中国技术经济研究会价值工程专业委员会 会刊
中国高等教育学会价值工程分会 会刊

中国学术期刊综合评价数据库来源期刊
万方数据—数字化期刊群入网期刊
中文科技期刊数据库收录期刊

ISSN 1006-4311

CN13-1085/N

JIAZHI GONGCHENG

2022 2

上旬刊（总第 624 期 / 第 41 卷）

价值工程

ISSN 1006-4311



9 771006 431068

万方数据

价值工程

2022年2月上旬刊 (总第624期 / 第41卷)

1982年创刊

2022年2月8日出版

中国商界文联会刊

中国技术经济研究会价值工程专业委员会会刊
中国高等教育学会价值工程分会会刊

封面刊名题字：袁宝华

主管单位：

河北省科学技术协会

主办单位：

河北省技术经济管理现代化研究会

总顾问：管在源

总 编：高志彪

总编室：师瑞

电 话：0311-87024742

编 辑 部：马慧霞

刘英禄

电 话：0311-83020178

0311-83036626

传 真：0311-87024742

投稿信箱：vezzsbjb@163.com

网 址：www.vezzs.com

责任编辑：高生明

封面设计：王金军

版面设计：韩宇红

国际标准连续出版物号：ISSN 1006-4311

国内统一连续出版物号：CN 13-1085/N

国内邮发代号：18-2

国内订阅：全国各地邮局

国内发行：河北省报刊发行局

国外发行：中国国际图书贸易总公司

印 刷：廊坊市长岭印务有限公司

编辑出版单位：价值工程杂志社

社 址：石家庄槐安西路88号

邮 编：050091

国内定价：30.00元人民币

海外定价：30.00美元

目录

* 价值管理 *

- 基于 DEA 的文化产业公司的经营效率评价 肖婵娟(1)
徐州建材工业高质量发展的现状、机制与对策 牛鸿蕾等(4)
廊坊市生活垃圾的处理现状及发展建议 冯建红等(8)
新形势下建筑工程造价管理研究 陈小燕(11)
地铁隧道盾构法施工安全风险管理研究 陈仙东(14)
新形势下国有企业人力资源绩效考核改进措施 王琼(17)
基于全过程控制的建筑工程造价跟踪审计研究 张陆萍(20)
市政道路工程的造价管理研究 朱晓宇(23)
建筑工程预结算审核与施工成本管理的分析 程绍祥(26)
电力工程 10kV 配电线路的施工技术探析 张强等(29)
水利水电项目施工技术及工程管理研究 魏洁(32)
文旅特色小镇投资建设风险研究 罗树丰等(35)
建筑工程经济成本管理方面的问题及对策 朱玲(38)
影响建筑工程管理的主要因素及对策探讨 万海霞(41)
建筑工程造价的动态管理与成本优化控制要点分析 孙若寒等(44)
水利规划中河道整治措施探讨 黄春芸(47)
房建施工企业的劳务分包管理技术研究 李琼(50)

* 价值链·供应链 *

- 基于分支冻结算法的供应商选择与订单分配 刘丹阳等(53)

* 功能载体创新 *

- 关于电动汽车充电桩的设计与研究 王梦楠等(56)
边坡支护工程抗滑桩桩间土拱效应研究 王正龙等(59)
工程实施及竣工结算时投资超概原因分析及解决方案 薛安泉(62)
基于海绵城市理念的市政既有道路改造施工工艺分析 王浙盈(65)
50米钢箱梁加工制造施工技术研究 罗康勇(68)
临海地区松散岩层斜坡道冻结加固技术研究 孙佳等(73)
钢筋混凝土箱梁廊桥受力分析与设计计算 王七林等(76)
空心板桥加固维修施工工艺 刘世锦等(79)
机电安装工程暖通空调新技术及其发展研究 陈耀武等(82)
公路隧道工程中浅埋地段的施工技术分析 李峥嵘(85)

隧道二衬混凝土施工质量现场控制技术	杜亮(88)
城镇燃气施工中的管道接口质量控制探讨	杨楠(92)

* 价值应用 *

质量管理在矿井建设项目中的实施要点探究	阴玉峰(95)
一种电网供应商服务信息共享工具的设计与实现	张连瑞 等(98)
基于 BIM 技术的某医院地下车库管线综合应用研究	徐天耀 等(101)
瞬变电磁法在引水隧洞超前预报中的应用	汤金云 等(104)
钢桁-混凝土梁桥体外预应力加固受力分析	田波波(107)
生态护坡技术在河道治理中的应用研究	曹喜翰(110)
低碳住宅建筑理念在建筑学设计中的应用	黄昊(113)
工厂供配电系统中的无功补偿技术探究	谢澜(116)
公路桥梁施工的质量隐患及解决对策	苏素芳(119)
MDF 总配线架保安单元过流过压保护方案比较	盛灿英(122)
浅析同步碎石封层技术在公路预防性养护中的应用	王孝华(125)
浅析地质工作中实验测试技术的重要性	丁超(128)
电力拖动系统的自动控制与安全保护策略分析	杜星(131)
房建土建工程中的高支模施工技术探讨	蒋杰(134)
基于现场统计的混凝土胶凝材料用量域值探究	武西荣(137)
建筑工程施工中深基坑支护的施工技术管理研究	位祥(140)
城镇燃气管理中物联网技术的应用	刘宇翔(143)
在役城市高架桥下部结构检测技术与评估	邹大晴 等(146)
建筑工程中岩土勘察及地基处理技术的分析	陈金(149)
核心机加温加压进气压力控制过程研究	李存(152)
普通干线公路沥青路面预防性养护技术探讨	任平(155)
建筑设计企业 BIM 技术应用研究	郑毅 等(158)
数字经济与区域经济高质量发展研究	马成文 等(161)

* 理论综述 *

浅谈国内海床 CPT 装备的短板与发展展望	梁春江(166)
-----------------------	----------

郑重声明

- 1、本刊所刊载内容未经书面许可，任何部分不得以任何形式翻印、转载、复制，及存储于检索系统，提供给公众或私人使用。
- 2、来稿在 15 个工作日内给予回复录用与否，若未收到回复信息，请来电咨询稿件进展。来稿正常刊登周期为 3 个月内，未录用者可自行处理。请勿一稿多投，不涉及保密、署名无争议，请作者自留底稿，恕不退稿。
- 3、编辑部对来稿文章标题、内容、参考文献等保留删修权，不同意删修的稿件请在来稿中声明。
- 4、本刊已许可相关期刊网站以数字化方式复制、汇编、发行、信息网络传播本刊全文。本刊支付的稿酬(或稿酬与作品审稿费、与作品样刊费相抵)已包含相关期刊网站著作权使用费，所有署名作者向本刊提交文章发表之行为视为同意上述声明。如有异议，请在投稿时说明，本刊将按作者说明处理。

Value Engineering
(VE)
 Fortnightly Issue
 Started in 1982
 Vol.41 2.a
 (Sum No.624)
 Published in Feb. 8, 2022

Inscribed: Yuan Baohua
General Counsel: Guan Zaiyuan
Executive Editor-in-chief:
 Gao Zhibiao
Manager:
 Hebei Association for
 Science and Technology
Sponsor:
 Hebei Institute of Technology
 Economy and Modern Management

Chief Editor's Department:
 Shi Rui
Editor: Editorial Team of VE
Publisher:
 Magazine Publishing House of VE
Address:
 No.88 Huai'an Road, Shijiazhuang
Tel: (0311) 87024742
E-mail: vezzshjb@163.com

Printed by:
 Changling Printing Co., Ltd. Langfang
Distributor: Shijiazhuang Post Office
Subscriptions:
 Chinese Local Post Office
Domestic Issue Code: 18-2
Domestic Single Price: ¥30.00
Overseas Single Price: 30.00
Open Publishing
ISSN 1006-4311
CN 13-1085/N

CONTENTS

VALUE MANAGEMENT

- 1 Evaluation of Operational Efficiency of Cultural Industry Companies Based on DEA XIAO Chan-juan
 4 Present Situation, Mechanism and Countermeasures of High Quality Development of Xuzhou Building Materials Industry NIU Hong-lei,*et al.*
 8 Current Situation and Development Suggestion of Domestic Waste Treatment in Langfang City FENG Jian-hong,*et al.*
 11 Research on Construction Cost Management under the New Situation CHEN Xiao-yan
 14 Research on Safety Risk Management of Subway Tunnel Construction by Shield Method CHEN Xian-dong
 17 Improvement Measures for Human Resource Performance Evaluation of State-owned Enterprises under the New Situation WANG Qiong
 20 Research on Construction Cost Tracking Audit Based on Whole Process Control ZHANG Lu-ping
 23 Research on Cost Management of Municipal Road Engineering ZHU Xiao-yu
 26 Analysis of Construction Project Pre-settlement Audit and Construction Cost Management CHENG Shao-xiang
 29 Analysis on Construction Technology of 10kV Distribution Line in Power Engineering ZHANG Qiang,*et al.*
 32 Research on Construction Technology and Engineering Management of Water Conservancy and Hydropower Projects WEI Jie
 35 Research on Investment and Construction Risks of Cultural and Tourism Characteristic Towns LUO Shu-feng,*et al.*
 38 Problems and Countermeasures in Economic Cost Management of Construction Engineering ZHU Ling
 41 Discussion on Main Factors Affecting Construction Engineering Management and Countermeasures WAN Hai-xia
 44 Dynamic Management of Construction Cost and Analysis of Key Points of Cost Optimization Control SUN Ruo-han,*et al.*
 47 Discussion on River Regulation Measures in Water Conservancy Planning HUANG Chun-yun
 50 Research on Labor Subcontracting Management Technology of Housing Construction Enterprises LI Qiong

VALUE CHAIN·SUPPLY CHAIN

- 53 Supplier Selection and Order Allocation Based on Branch Freezing Algorithm LIU Dan-ying,*et al.*

FUNCTION CARRIER INNOVATION

- 56 Design and Research on Electric Vehicle Charging Pile WANG Meng-nan,*et al.*
 59 Study on Soil Arch Effect between Anti-slide Piles in Slope Supporting Engineering WANG Zheng-long,*et al.*
 62 Cause Analysis and Solution of Over Estimation of Investment in Project Implementation and Completion Settlement XUE An-quan
 65 Analysis of Construction Technology of Municipal Existing Road Reconstruction Based on Sponge City Concept WANG Zhe-ying

68 Research on Manufacturing and Construction Technology of 50m Steel Box Girder	.....	LUO Kang-yong
73 Study on Freezing Reinforcement Technology of Loose Rock Slope in Coastal Area	.....	SUN Jia, <i>et al.</i>
76 Stress Analysis and Design Calculation of Reinforced Concrete Box Girder Covered Bridge	.....	WANG Qi-lin, <i>et al.</i>
79 Construction Technology of Reinforcement and Maintenance of Hollow Slab Bridge	.....	LIU Shi-jin, <i>et al.</i>
82 Research on New Technology and Development of HVAC in Electromechanical Installation Engineering	.....	CHEM Yao-wu, <i>et al.</i>
85 Analysis on Construction Technology of Shallow Buried Section in Highway Tunnel Engineering	.....	LI Zheng-rong
88 On-site Control Technology of Construction Quality of Tunnel Secondary Lining Concrete	.....	DU Liang
92 Discussion on Quality Control of Pipeline Interface in Urban Gas Construction	.....	YANG Nan

VALUE APPLICATION

95 Exploration of the Implementation Points of Quality Management in Mine Construction Projects	.....	YIN Yu-feng
98 Design and Implementation of a Service Information Sharing Tool for Power Grid Suppliers	.....	ZHANG Lian-rui, <i>et al.</i>
101 Research on the Comprehensive Application of Pipelines in a Hospital Underground Garage Based on BIM Technology	.....	XU Tian-yao, <i>et al.</i>
104 Application of Transient Electromagnetic Method in Advance Prediction of Diversion Tunnel	.....	TANG Jin-yun, <i>et al.</i>
107 Stress Analysis of External Prestressed Reinforcement of Steel Truss-concrete Girder Bridge	.....	TIAN Bo-bo
110 Study on the Application of Ecological Slope Protection Technology in River Regulation	.....	CAO Xi-han
113 Application of Low Carbon Residential Building Concept in Architectural Design	.....	HUANG Hao
116 Research on Reactive Power Compensation Technology in Factory Power Supply and Distribution System	.....	XIE Lan
119 Hidden Dangers of Highway Bridge Construction and Countermeasures	.....	SU Su-fang
122 Comparison of Overcurrent and Overvoltage Protection Schemes for MDF Main Distribution Frame Security Units	.....	SHENG Can-ying
125 Analysis on the Application of Synchronous Crushed Stone Sealing Technology in Highway Preventive Maintenance	.....	WANG Xiao-hua
128 Importance of Geological Experiment in Geological Work	.....	DING Chao
131 Analysis of Automatic Control and Safety Protection Strategy of Electric Traction System	.....	DU Xing
134 Discussion on High-support Formwork Construction Technology in Housing and Civil Engineering	.....	JIANG Jie
137 Research on the Threshold Value of Concrete Cementitious Material Consumption Based on Field Statistics	.....	WU Xi-rong
140 Research on Construction Technology Management of Deep Foundation Pit Support in Construction Engineering	.....	WEI Xiang
143 Application of Internet of Things Technology in Town Gas Management	.....	LIU Yu-xiang
146 Inspection Technology and Evaluation of Substructure of Urban Viaducts in Service	.....	ZOU Da-qing, <i>et al.</i>
149 Analysis of Geotechnical Investigation and Foundation Treatment Technology in Construction Engineering	.....	CHEM Jin
152 Intake Pressure Control Process Study for Core Engine Pressurized Inlet Test	.....	LI Cun
155 Discussion on Preventive Maintenance Technology of Asphalt Pavement on Ordinary Arterial Highway	.....	REN Ping
158 Research on the Application of BIM Technology in Architectural Design Enterprises	.....	ZHENG Yi, <i>et al.</i>
161 Research on Digital Economy and High Quality Development of Regional Economy	.....	MA Cheng-wen, <i>et al.</i>

THEORETICAL REVIEW

166 A Brief Discussion on the Shortcomings and Development Direction of Seabed CPT Equipment in China	LIANG Chun-jiang
---	-------	------------------