

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 5

上旬刊(总第 633 期 / 第 41 卷)

价值工程

ISSN 1006-4311



13 >

9 771006 431068

万方数据

价值工程

2022年5月上旬刊 (总第633期 / 第41卷)

1982年创刊

2022年5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

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 *

- 公路工程全过程造价管理与成本控制方案 雷俊峰(1)
物理隔离方式在打造海绵城市中的应用分析 陈琼玲(4)
基于灰色关联度模型的用电量影响因素分析 邢素洁(7)
乡村振兴战略下国有林区家庭可持续生计研究 魏俊芳(10)
国际国内双循环背景下中小尺寸液晶显示企业营销策略研究
..... 徐琳琳(13)

- 老城区慢行交通系统的分析与研究 郑影(16)
基于 AHP 的地铁施工风险管理研究 樊愫琴(20)
舟山港与浙江省经济发展互动性研究 李曦萌(23)
工程设计企业产融结合必要性及实现路径研究 尹中涛(26)
双循环下三明市乡村振兴的产业兴旺路径研究 蔡芳娜等(29)

* 价值链·供应链 *

- 基于霍尔三维结构的应急物流管理体系建设研究 夏良华(32)
供应链中最优供应商选择的研究 张梦媛(35)

* 功能载体创新 *

- 基于农田水利工程的围堰施工技术分析 鞠玉婷(38)
高层住宅楼给水系统改造方法研究 林立(41)
浅析预制装配式桥梁抗震设计及抗震措施 王成江(44)
智能化控制阀在石油化工中的应用设计探究 曹骏(47)
山区陡壁带装配式托架及挂篮一体化设计施工技术
..... 曹华斌等(50)

- 互通式立交设计方案的选择分析 蔡燕燕(53)
基于有限元法的多级吸能式防撞垫碰撞仿真分析 王新等(56)
砌体结构抗震鉴定与加固 黄灏(60)
紧邻运营高速高陡边坡控制爆破措施及施工工艺研究
..... 张文龙等(63)
- 市政桥梁工程下部结构施工技术探究 周志勇(67)
偏心不耦合装药爆炸荷载作用下岩石损伤效应研究
..... 郭冠潭(70)
- 钢箱梁桥面高弹高粘沥青面层施工技术 韩娟(74)
酒店消防给水系统设计分析 潘驭(77)

浅谈海南环岛旅游公路高液限黏土改良技术	罗光明 等(80)
露天矿高铁锰废水处理工程实际应用分析	王胆(83)
城市轨道交通盾构区间基岩突起深孔爆破预处理技术	于飞(86)
富水软弱破碎岩层隧道固结开挖施工技术	彭建军(89)
山区高墩双塔斜拉桥约束体系研究	黄永福 等(94)
两组无充填物节理对爆炸裂纹扩展的影响研究	王爽 等(97)
沿海地区桥梁混凝土防腐施工技术研究	杜冲冲 等(101)
基于 Multi-Agent 的露天矿山无人运输系统的研究	陈成 等(105)
三台阶隧道二衬裂缝处治设计	陈星宇 等(109)
复杂条件下大跨度斜交框架顶进线路加固及顶进技术	刘勇(113)
高速铁路高填方陡坡地段预制梁厂规划与施工	罗红中(116)
盾构机吊装下井施工工艺	王哲(119)
海翔路高架桥钢箱梁顶推施工关键技术分析	唐宁(122)
邻近既有铁路深水桥水下爆破施工技术	张恩桥(125)
铁路桥梁钻孔灌注桩溶洞处理措施分析	陈建辉(128)
竹胶板为侧模在现浇梁施工中的应用	唐玲玉(131)
承插型盘扣式钢管支架设计分析	娄昆阳(134)
大跨度现浇简支梁施工工艺研究	李梅珍(137)
某地铁控制中心大楼防烟与排烟系统设计	谭旖琳(140)
双肢薄壁高墩施工液压自爬模设计研究	许林军(143)

* 价值应用 *

BIM 技术在地铁施工阶段安全技术质量的应用研究	史佩军(146)
地理国情监测中要素数据的质量控制分析	谢天记(150)
道路桥梁设计问题与施工中裂缝成因分析	张平 等(153)
建筑钢结构抗震设计及运用探析	李俊(156)
内蒙古自治区地形三维模型系统研制的设计与实现	齐洪波(159)

* 理论综述 *

“双碳”背景下光伏产业的发展前景分析	张玲 等(162)
泡沫沥青冷再生技术研究综述	江磊(165)

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 5.a
(Sum No.633)
Published in May 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 Whole Process Cost Management and Cost Control Scheme of Highway Engineering LEI Jun-feng
4 Application Analysis of Physical Isolation Methods in Creating Sponge Cities CHEN Qiong-ling
7 Analysis of Influencing Factors of Electricity Consumption Based on Grey Correlation Model XING Su-jie
10 Study on Sustainable Livelihood of Families in Ational Forest Area under Rrural Vitalization Strategy WEI Jun-fang
13 Research on the Marketing Strategy of Small and Medium-sized Liquid Crystal Display Enterprises under the Background of International
and Domestic Double Circulation XU Lin-lin
16 Analysis and Research of Slow Traffic System in Old City ZHENG Ying
20 Research on Metro Construction Risk Management Based on AHP FAN Su-qin
23 Research on the Economic Development Interaction between Zhoushan Port and Zhejiang Province LI Xi-meng
26 Research on the Necessity and Realization Path of the Integration of Industry and Finance in Engineering Design Enterprises
..... YIN Zhong-tao
29 Research on Industrial Prosperity Path of Rural Revitalization in Sanming under Dual Circulation CAI Fang-na,*et al.*

VALUE CHAIN·SUPPLY CHAIN

- 32 Research on Construction of Emergency Logistics Management System Based on Hall Three-Dimensional Structure XIA Liang-hua
35 Research on Optimal Supplier Selection in Supply Chain ZHANG Meng-yuan

FUNCTION CARRIER INNOVATION

- 38 Analysis of Cofferdam Construction Technology Based on Farmland Water Conservancy Engineering JU Yu-ting
41 Research on Reconstruction Method of Water Supply System in High-rise Residential Building LIN Li
44 Preliminary Analysis of Seismic Design and Seismic Measures of Prefabricated Bridges WANG Cheng-jiang
47 Research on Application Design of Intelligent Control Valve in Petrochemical Industry CAO Jun
50 Integrated Design and Construction Technology of Mounted Brackets and Hanging Baskets on Steep Walls in Mountainous Areas
..... CAO Hua-bin,*et al.*
53 Selection and Analysis of Interchange Design Schemes CAI Yan-yan
56 Collision Simulation Analysis of Multi-stage Energy-absorbing Anti-collision Pad Based on Finite Element Method
..... WANG Xin,*et al.*

60 Seismic Appraisal and Strengthening of the Masonry Structure	HUANG Hao
63 Study on Control Blasting Measures and Construction Technology of High Speed and Steep Slope Adjacent to Operation	ZHANG Wen-long, <i>et al.</i>
67 Research on Construction Technology of Substructure of Municipal Bridge Engineering	ZHOU Zhi-yong
70 Study on Rock Damage Effect under Blasting Load of Eccentric Decouple Charge	GUO Guan-tan
74 Construction Technology of High-elasticity and High-viscosity Asphalt Surface for Steel Box Girder Bridge Deck	HAN Juan
77 Five-star Hotel Fire Design Analysis	PAN Yu
80 Research on the Improvement Technology of High Liquid Limit Clay for the Tourist Highway around the Island of Hainan	LUO Guang-ming, <i>et al.</i>
83 Practical Application Analysis of High Iron Manganese Wastewater Treatment Project in Open Pit Mine	WANG Dan
86 Pretreatment Technology for Deep Hole Blasting of Bedrock Protrusions in Urban Rail Transit Shield Tunnel	YU Fei
89 Construction Technology of Tunnel Consolidation Excavation in Water-rich Soft and Broken Rock Formations	PENG Jian-jun
94 Study on Restraint System of Double Tower Cable-Stayed Bridge with High Pier in Mountainous Area	HUANG Yong-fu, <i>et al.</i>
97 Two Groups of Non-filler Throttles Were Studied on the Effect of Explosive Crack Expansion	WANG Shuang, <i>et al.</i>
101 Research on Anticorrosion Construction Technology of Bridge Concrete in Coastal Areas	DU Chong-chong, <i>et al.</i>
105 Research on Driverless Transportation System in Open-pit Mines Based on Multi-agent	CHEN Cheng, <i>et al.</i>
109 Design of Treatment for Cracks in Secondary Lining of Sandaipo Tunnel	CHEN Xing-yu, <i>et al.</i>
113 Reinforcement and Jacking Technology of Long-span Oblique Frame Jacking Line under Complex Conditions	LIU Yong
116 Planning and Construction of Precast Beam Yard in High Fill Steep Slope Section of High-speed Railway	LUO Hong-zhong
119 Construction Technology of Shield Tunnel Hoisting and Going Down	WANG Zhe
122 Analysis on Key Technology of Steel Box Girder Jacking Construction of Viaduct of Haixiang Road	TANG Ning
125 Construction Technology of Underwater Blasting for Deep Water Bridge Adjacent to Existing Railway	ZHANG En-qiao
128 Analysis of Treatment Measures for Karst Cave of Bored Pile of Railway Bridges	CHEN Jian-hui
131 Application of Bamboo Plywood as Side Formwork in Cast-in-situ Beam Construction	TANG Ling-yu
134 Design and Analysis of the Buckle-type Steel Pipe Support for Socket-type Disk	LOU Kun-yang
137 Study on Construction Technology of Long-span Cast-in-situ Simply Supported Beam	LI Mei-zhen
140 Design of Smoke Prevention and Smoke Exhaust System in a Subway Control Center Building	TAN Yi-lin
143 Research on the Design of Hydraulic Self-climbing Formwork for the Construction of Thin-walled High Piers with Double Limbs	XU Lin-jun

VALUE APPLICATION

146 Research on the Application of BIM Technology in the Safety Technology Quality of Subway Construction Stage	SHI Pei-jun
150 Quality Control Analysis of Element Data in Geographical National Conditions Monitoring	XIE Tian-ji
153 Design Problems of Roads and Bridges and Analysis of the Causes of Cracks in Construction	ZHANG Ping, <i>et al.</i>
156 Analysis on Seismic Design and Application of Building Steel Structure	LI Jun
159 Design and Realization of Development of Terrain 3D Model System in Inner Mongolia Autonomous Region	QI Hong-bo

THEORETICAL REVIEW

162 Analysis on the Development Prospect of Photovoltaic Industry under the Background of "Double Carbon"	ZHANG Ling, <i>et al.</i>
165 A Review on Cold Regeneration Technology Based on Foamed Asphalt	JIANG Lei