

## 目 次

### 煤矿安全

浅谈加强基层煤矿安全监管干部队伍建设	徐剑浪(1)
山西矿防治水工作的思考与对策	罗顺根,游楠岭,谢学亮(4)
全力构建煤矿安全生产“物联网”	周立新,杨俊卿(6)
东方红煤矿复采架子面水患的防治	彭斌(9)
网络并行电法在工作面“三带”观测中的应用	王国庆,赵战轻,陈太峰,等(11)
对乡镇煤矿淹井事故的思考	郑仁忠(13)
南山煤矿石门揭煤防突技术的应用	刘洋(15)
仙槎煤业瓦斯综合防突与治理的实践	戴炳旺,邓小宝(17)
浅谈乡镇煤矿的防治水监察	邓素刚(19)
综采放顶煤工作面煤尘的综合防治	张庆德(20)
综放工作面收作期间架尾注胶防灭火技术研究	杨泽全,岳巍(22)
浅谈钻孔事故发生的原因及预防措施	杨火根(24)
高位钻孔注水注浆防灭火在曲江公司的应用	刘全胜(26)
综采工作面煤尘防治现状及发展趋势	成瑜(28)
漆工煤矿充水因素分析与防治水管理	王明星(30)

### 技术经验

ZMCY60R型铲煤机在尚庄矿的应用	付宇,高宇,张春俊(33)
内蒙古色连一井副斜井基岩段综掘实践	熊善平,倪礼强(35)
Ⅱ型钢工艺在多煤层特殊地段的应用	杨志全,邢江龙(37)
岩巷快速掘进技术研究	孙传军,郑思达(39)
炮掘煤巷拱形大断面锚网支护的应用	李长新(41)
无极绳运输中梭车连接装置的改进	崔雪红(43)
磁力开关远控电路的改进与应用	肖正儒,涂勇,周文(46)
箱型井架分段组装和空中对接吊装工艺	张红旗(48)
输送带的跑偏原因及调偏装置	赵红莲(50)
新型自动控水装置在乳化泵水箱中的应用	陈涛,陈太峰(52)
复合土工膜在某热电厂中水回用水池中的应用	汪锴,孙瑜(53)

### 专题论述

沿沟煤矿副斜井巷道修复治理工程实践	束华英,陈晓阳(55)
青山矿新立井破碎带探水注浆实践	彭先林,郭安萍,吴君宁,等(57)
大直径深冻结井永久井架基础防冻施工技术	李俊,吴增云(60)
金刚石绳索取芯钻进在煤田地质勘探中的应用	熊震(62)
DW31.5-300/100XMEE型液压支柱的应用	甘国华(64)
矿井矸石运输系统的改造及其设备应用	李永姣,寇学峰,康俊霞(66)
偏距法测设曲线巷道中线	付绍春,阎晓光,胡晓生,等(68)
用比拟法预测急倾斜煤层开采矿井涌水量的方法	周汉江,顾志广,彭先林,等(70)
浅谈五万分之一土地利用现状图缩编的质量控制	张华平,查艳萍(72)
钻孔灌注桩在赤江大桥的施工实践	叶小良(74)
福伊特双腔调速偶合器在重型刮板机上的应用	魏建军(76)
2#汽轮机保护系统PLC设计	宋德涛(79)
浅析大型钢制井架安装控制测量	徐柏林(82)
SGZ150/740型双链刮板输送机的设计	李国顺,陶淑清(84)

ZJT 矿用隔爆兼本安型变频调速装置在仙槎矿的应用 ..... 汪梅生,应新平(86)

## 问题探讨

AutoCAD 在贯通几何要素解算中的应用	..... 兰 辉,范建南(88)
坪湖矿压风排渣工艺施工抽放钻孔试验	..... 朱丰玲,李向荣,谭建文,等(90)
CASS 和 MAPGIS 在城乡建设用地增减挂钩中的应用	..... 毛志芳,孙立恒(93)
临时支护防片网的革新与应用	..... 刘小刚,祁明峰(95)
回采巷道矿压观测及围岩控制技术研究	..... 许敬立(97)
浅谈数字化地形测图在城市建设中的应用	..... 陈玉盛,张华平(99)
煤炭资源利用现状调查中遇到的问题及解决方法	..... 伯 慧,余 伟(101)
浅谈 MapGIS 数据到 E00 数据的转换技巧	..... 刘开红,张岚(103)
螺杆空压机冷却器水垢的清除	..... 张殿坤(105)
煤泥的浮选柱浮选试验研究	..... 张劲松(107)

## 经营管理

浅析小区段联合准备与开采的综合效益	..... 卢文洪,龚建军,朱智凯,等(110)
音像资料馆媒体资产管理系统的应用	..... 方 兴(112)
新采区采准巷道施工方案优化及管理	..... 杨成金,卢文洪,罗伟明,等(114)
开展煤矿区队干部中专学历教育的实践认识	..... 熊佩凤(116)
论轨道交通工程招标阶段时的项目管理	..... 李 玲,裴 剑(118)
浅谈国际工程项目管理与进度控制	..... 李鸿歆,卓耀辉(120)

## 本刊编辑工作委员会

名誉顾问	包尚贤	易光景	总顾问	贺爱民	李良仕
顾 问	周树森	彭志祥	张慎勇	易光藕	龚绍礼 蒋云龙 胡立俭 付春生 李木根 李立新 肖华辉
	王正萍	邱文奎	陈宗辉	陈水松	
主 任	张赣萍		副主任	郭正义	叶忠群
委 员	王水亮	谭亚明	李 松	岑代全	江新允 彭呈喜 谭泽平 吴安德 傅兴维 胡中祺 项元海 王 涛
	范 坚	邬斌钢	曾洪晖	王金玲	袁安辉 王明贵 林国尧 余子兵 蒋 荣 胡秋祥 舒桂德 李春发
协办单位	萍乡矿业集团有限责任公司		丰城矿务局		江西新余矿业有限责任公司 乐平矿务局
	江西省煤田地质局	中鼎国际工程有限责任公司		江西工业工程职业技术学院	江西煤矿安全培训中心
	江西煤矿矿用产品检验中心		江西众一集团公司	武宁县煤矿	横峰县铺前煤矿
江西煤炭科技	季 刊	(1979 年创刊)	JIANGXI COAL SCIENCE & TECHNOLOGY Quarterly	(Started in 1979)	
2010年第4期(总第128期)	2010年11月出版	No. 4 2010	(Series No. 128)		November 2010

主 管	江西煤矿安全监察局	Responsible Institution	Jiangxi Bureau of Colliery Safety Supervision
主 办	江西省煤炭学会	Sponsor	Jiangxi Coal Society
	江西省煤炭集团公司		Jiangxi Coal Group Ltd
	江西省煤炭经济研究会		Jiangxi Coal Economy Association
	江西省煤炭工业研究所		Jiangxi Research Institute of Coal Industry
编 辑 出 版	《江西煤炭科技》编辑部	Editorial and Publishing Dept.	Editorial Office of Jiangxi Coal Science & Technology
主 编	郭正义	Chief Editor	Guo Zhengyi
副 主 编	叶忠群	Associate Chief Editor	Ye Zhongqun
责 任 编辑	胡中祺	Responsible Editor	Hu Zhongqi
地 址	南昌市北京东路 23 号(330029)	Address	23 Beijing East Street, Nanchang, China(Postcode 330029)
电 话 / 传 真	(0791)8326754/7151362	Tel/Fax	(0791)8326754/7151362
电子信箱	jxmtkj@tom.com	E-mail	jxmtkj@tom.com
印 刷	江西省人大印刷厂	Printed by	Printing House of Jiangxi People's Congress
发 行 范 围	公开发行	Issuing Scope	Public Distribution
订 购 处	《江西煤炭科技》编辑部	Order Office	Editorial Office of Jiangxi Coal Science & Technology

刊 号 ISSN1006-2572  
Publication No. CN36-1121/TD

广 告 经 营 许 可 证 号  
License No. of Advertisin

3600004000039

定 价 10.00 元  
List Price

## Contents

### Colley Safety

- Discussion on Improving Team Development of Safety Supervision Cadres in Grass—roots Colleysies ..... Xu Jianlang(1)  
Thinking and Countermeasures of Water Control in Shanxi Colley ..... Luo Shungen, You Nanling, Xie Xueliang(4)  
Sparing No Effort in Building “Internet of Things” of Colley Safety Production ..... Zhou Lixin, Yang Junqing(6)  
Application of Prevention Technology of Water Disaster in Working Face with Second Mining Shelf ..... Peng Bin(9)  
Application of Electrical Method of Network Parallel in “Three—Zones” Observation ..... Wang Guoqing, Zhao Zhanqing, Chen Taifeng, et al(11)

- Thinking of Future of Township Colley after Submergence ..... Zheng Renzhong(13)  
Application of Outburst Prevention Technology when Uncovering Coal in Crosscut in Nanshan Colley ..... Liu Yang(15)  
Practice and Cognition of Gas Comprehensive Prevention and Control in Xiancha Coal Industry Co., Ltd. .... Dai Bingwang, Deng Xiaobao(17)  
Discussion on Supervision of Water Control in Township Colley ..... Deng Sugang(19)  
Comprehensive Dust Prevention in Full Mechanized Top—Coal Carving Face ..... Zhang Qingde(20)

- Study on Technology of Fire Prevention and Extinguishing with Glue Injection in Support End During Finishing Cut in Caving Face ..... Yang Zequan, Yue Wei(22)

- Discussion on Causes and Prevention Measures of Drilling Accident ..... Yang Huogen(24)  
Application of Fire Prevention and Extinguishing with Water Injection and Grouting into High—level Borehole in Qujiang Co. ..... Liu Quansheng(26)

- Status of Coal Dust Control and Its Development Trend at Fully—mechanized Working Face ..... Cheng Yu(28)  
Factor Analysis of Water—filling and Water Control Management in Qigong Colley ..... Wang Mingxing(30)

### Technology & Experience

- Application of ZMCY60R—type Coal Shovel in Shangzhuang Colley ..... Fu Yu, Gao Yu, Zhang Chunjun(33)  
Practice on Fully—Mechanized Driving in the Bedrock Section of Auxiliary Inclined Shaft in Selian No. 1 Colley in Inner Mongolia ..... Xiong Shaping, Ni Liqiang(35)

- Application of II—type Steel Technique in Multi—Seam special place ..... Yang Zhiqian, Xing Jianglong(37)

- Study on Rapid Driving Technology in Rock Roadway ..... Sun Chuanjun, Zheng Sida(39)

- Application of Bolt—mesh Support with Arched Section in Blasting Driving Roadway ..... Li Changxin(41)

- Improvement of Connecting Device of Endless—rope Shuttle Car ..... Cui Xuehong(43)

- Improvement on Remote Control in Magnetic Switch ..... Xiao Zhengru, Tu Yong, Zhou Wen(46)

- Technique of Sectional Assembly and Air Joint Hoisting of Box Headframe ..... Zhang Hongqi(48)

- Cause for Deviation of Conveyor Belt and Offset Device ..... Zhao Honglian(50)

- Application of New Automatic Simple Device for Water Controlling in Water Tank of Emulsion Pump ..... Chen Tao, Chen Taifeng(52)

- Discussion on Application of Compound Geo—membrane in Reclaimed Water Reuse Pool ..... Wang Kai, Sun Yu(53)

### Managing Management

- Practice on Repair and Management Engineering at Roadway of Auxiliary Inclined Shaft in Yangou Colley ..... Su Huaying, Chen Xiaoyang(55)

- Practice on Water Prospecting Grouting at Fracture Zone of New Vertical Shaft in Qingshan Colley ..... Peng Xianlin, Guo Anping, Wu Junning, et al(57)

- Technology of Anti—freezing Construction on Permanent Headframe Base of Large—diameter Deep frozen shaft ..... Li Jun, Wu Zengyun(60)

- Application of Diamond—Rope—Coring Penetration in Coal Geological Exploration ..... Xiong Zhen(62)

- Application of DW31. 5—300/100XME Hydraulic Prop ..... Gan Guohua(64)

- Reformation and Equipment Application of Mine Coal Gangue Transportation System ..... Li Yongjiao, Kou Xuefeng, Kang Junxia(66)

- Application of Offset Distance Method to Setting out Midline of Curving Tunnel ..... Fu Shaochun, Yan Xiaoguang, Hu Xiaosheng, et al(68)

- Analogy Method of Predicting Water Discharge in Steeply Inclined Working Seam ..... Zhou Hanjiang, Gu Zhiguang, Pengxianlin, et al(70)

- Discussion on Quality Control for Compilation of 1:50000—scale Land—use Map ..... Zhang Huaping, Zha Yanping(72)

- Construction Practice on Bored Pile on Chijiang Bridge ..... Ye Xiaoliang(74)

- Application of Voith Dual—chamber Speed—controlled Coupler in Heavy Scraper Conveyor ..... Wei Jianjun(76)

- PLC Design of No. 2 Steam Turbine Protection System ..... Song Detao(79)

- Analysis of Control Survey of Large Steel Headframe Installation ..... Xu Bailin(82)

- Design of SGZ150/740 Double Chain Conveyor ..... Li Guoshun, Tao Shuqing(84)

- Application of ZJT Mining Explosion—Proof and Intrinsic—safe Frequency Control Device in Xiancha Colley ..... Wang Meisheng, Ying Xinpeng(86)

### Problem Probe

- Application of AUTOCAD in Holing—through Geometry Parameters Calculation ..... Lan Hui, Fan Jiannan(88)

- Experiment on Suction Hole in Construction of Silt Handling with Pressure Ventilation in Pinghu Colley ..... Zhu Fengling, Li Xiangrong, Tan Jianwen, et al(90)

- Application of CASS and MAPGIS in Increase—and—Decrease Connection of Urban and Rural Construction Land ..... Mao Zhifang, Sun Liheng(93)

- Innovation and application of Temporary Support Defense Network ..... Liu Xiaogang, Qi Mingfeng(95)

- Technical Research on Mine Pressure Observation and Adjoining Rock Control of Gateway ..... Xu Jingli(97)

- Discussion on Application of Digital Topographic Mapping in Urban Construction ..... Chen Yusheng, Zhang Huaping(99)

- Problems from Investigation on Status of Coal Resources Utilization of and Its Corresponding Solutions ..... Bai Hui, Yu Wei(101)

- Discussion on Technique of Data Conversion from MapGIS to E00 ..... Liu Kaihong, Zhang Lan(103)

- Removal of Water Scale in Cooler of Screw Air Compressor ..... Zhang Diankun(105)

- Study on Flotation Test of Flotation Column of Slime ..... Zhang Jinsong(107)

### Topic Exposition

- Analysis of Comprehensive Benefits of Combined Preparation and Mining in Small Section ..... Lu Wenhong, Gong Jianjun, Zhu Zhikai, et al(110)

- Application of Media Asset Management System in Audio and Video Library ..... Fang Xing(112)

- Construction Plan Optimization of Developing Entry in New Mining Area and Its Management ..... Yang Chengjin, Lu Wenhong, Luo Weiming, et al(114)

- Practical Understanding of Carrying out Secondary Vocational Degree Education of Cadres in Mining Area ..... Xiong Peifeng(116)

- Discussion on Project Management at Bidding Stage of Rail Transit Project ..... Li Jing, Pei Jian(118)

- Discussion on Management and Progress Control of International Engineering Project ..... Li Hongxin, Zhuo Yaohui(120)

Translator: Peng Xiaojuan, Ying Hongyu