

目 次

专题研究

- 旋转超高压双流道PDC钻头流场数值模拟研究 李帮民 汪志明 刘轶深等 (1)
- 寄生管充气钻井环空多相流流动特性研究 李根生 刘文旭 黄中伟等 (4)
- 扩眼型稳定器的设计及防斜性能分析 郑德帅 高德利 (9)
- 波纹管成型及膨胀过程力学性能分析 陶兴华 朱宏武 张 宏等 (12)

试验研究

- J55膨胀套管实物试验研究 练章华 杨 龙 冯耀荣等 (16)

- 重熔对电弧喷涂锌铝伪合金涂层性能的影响 高 伟 杜喜军 赵振云 (19)

设计计算

- 深水钻井隔水管法兰接头有限元分析程序 王荣耀 陈国明 鞠少栋 (22)
- 气体钻井用钻杆磨损后剩余强度分析 祝效华 刘少胡 陈绍安等 (25)
- 牛头刨式平面六连杆机构抽油机运动特性分析 屈文涛 陈 瑛 秦彦斌等 (28)

- 套管钻井扩眼器结构设计与启动特性研究 马汝涛 纪友哲 徐玉超等 (31)

- 井下连续管轴向力及其影响因素分析 王安义 梁 政 刘云见等 (35)

- 单弯螺杆钻具组合非线性瞬态动力学分析 肖云峰 周定照 杨世军 (39)

新产品开发

- 新型投捞流量一体化投捞器的开发与应用 胡江明 王 楠 詹伯华 (43)

- 新型导向液压丢手工具的研制及应用 廖前华 于小龙 刘禹铭等 (45)

- 随钻井斜监测预警系统研究 于小波 杨 超 (47)

应用技术

- 低产井有杆泵高效举升配套工艺 李兰竹 (50)

- 双流压分采工艺管柱 姚宝春 (53)

- 深层特稠油油藏吞吐后期提高单井产量技术 张子策 (55)

- 带压修井装置在胜坨油田的应用 杜丙国 邵宝华 (57)

- 水平井裸眼选择性分段压裂完井技术及工具 王建军 于志强 (59)

技术讨论

- 新型双台肩钻杆接头研究与应用 任 辉 高连新 鲁喜宁 (63)

- 钻柱的粘滑振动规律分析 牟海维 王 瑛 韩春杰 (67)

专题综述

- 井眼轨迹控制工具发展现状及趋势 冯 定 袁咏心 李汉兴等 (70)

- 油气管道内检测技术的发展 周 燕 董怀荣 周志刚等 (74)

国外石油机械

- 海洋钻井分流器系统技术分析与应用 南树岐 王定亚 任克忍等 (78)

- 国外智能完井技术介绍 阮臣良 朱和明 冯丽莹 (82)

经验集锦

- 反循环双级冲砂接头 管恩东 (85)

- 快速自动定位式顶驱导轨 张东海 陈 俊 蒋 毅 (87)

信息广角

- 宝石机械专利申请量连续5年保持23%以上增速 (11) 南阳二机集团低温钻机项目获河南省科学技术进步一等奖 (34)

CONTENTS

Sponsors:

PetroChina Equipment Manufacturing Company
Petroleum Engineering Commission, China Petroleum Society
Jianghan Machinery Research Institute
Jianghan Petroleum Administrative Bureau, SINOPEC

Chairman of Editorial Committee:

Li Xinhua

Executive Chairman of Editorial Committee:

Li Qingyi

Editor in Chief:

He Huiqun

Executive Editor-in-chief:

Xie Shouping

Editor & Publisher:

The Editorial Office of CPM

Address:

Chihu Road, Jingzhou City, Hubei Province, 434000 P. R. China
Tel: 86-716-8127778
86-716-8121243
86-716-8121008

Fax: 86-716-8222483

E-mail: syjxzz@vip.sina.com

<http://www.syjxzz.com.cn>

<http://syji.chinajournal.net.cn>

Overseas Distributor:

China International Book Trading Corporation
P. O. Box 399, Beijing
Code No. M6650

Price per copy: \$4.0

Subscription rate for 1 year: \$48

• MONOGRAPHIC STUDY •

- 1 A numerical simulation study of the flow field of the rotary superhigh pressure double-channel PDC drill bit
Li Bangmin, Wang Zhiming, Liu Yiming, et al.
- 4 A study of the flow characteristics of the annular multiphase flow in parasitic pipe-based aerated drilling
Li Gensheng, Liu Wenxu, Huang Zhongwei, et al.
- 9 The design of reaming stabilizer and an analysis of its anti-deviation performance
Zheng Deshuai, Gao Deli
- 12 An analysis of the mechanical properties of the forming and expansion process of the bellows
Tao Xinghua, Zhu Hongwu, Zhang Hong, et al.

• TEST AND RESEARCH •

- 16 Research on the full scale test of the J55 expandable casing
Lian Zhanghua, Yang Long, Feng Yaorong, et al.
- 19 The effect of remelting on the performance of arc spraying pseudo zinc-aluminum alloy coating
Gao Wei, Du Xijun, Zhao Zhenyun

• DESIGN AND CALCULATION •

- 25 An analysis of the residual strength of the drill pipe for gas drilling after abrasion
Zhu Xiaohua, Liu Shaohu, Chen Shao'an, et al.
- 31 Research on the structural design and start-up characteristics of the casing drilling reamer
Ma Rutao, Ji Youzhe, Xu Yuchao, et al.
- 35 An analysis of the axial force of the bottom-hole coiled tubing and its influencing factors
Wang Anyi, Liang Zheng, Liu Yunjian, et al.

• NEW PRODUCTION DEVELOPMENT •

- 43 A new-type fisher characterized by simultaneous fishing and flow metering
Hu Jiangming, Wang Nan, Xu Baihua
- 45 Development and application of a new-type navigational and hydraulic release tool
Liao Qianhua, Yu Xiaolong, Liu Yuming, et al.
- 47 Research on the hole deviation monitoring-while-drilling system
Yu Xiaobo, Yang Chao

• APPLIED TECHNIQUE •

- 53 The technological pipestring of double flow pressure and separate-zone production
Yao Baochun
- 59 The completion technology and tool for open-hole preferential staged fracturing of the horizontal well
Wang Jianjun, Yu Zhiqiang