

- ◆ 《中国科学引文数据库》来源期刊
- ◆ 《中国学术期刊综合评价数据库》来源期刊
- ◆ 《中文科技期刊数据库》全文收录期刊

- ◆ 《中国核心期刊（遴选）数据库》收录期刊
- ◆ 《中国期刊全文数据库》收录期刊
- ◆ 《中国期刊网》《中国学术期刊（光盘版）》全文收录期刊



创建绿色家园

全面腐蚀控制

唯君题



TOTAL CORROSION CONTROL

祝贺：

中国工业防腐蚀技术协会

成立

35年

ISSN 1008-7818



9 771008 781147

万方数据

中国工业防腐蚀技术协会主办



全面腐蚀控制杂志社出版

11

2019.VOL.33

1986年创刊·公开发行

全面腐蚀控制

CONTENTS 目次

管理篇

【协会工作】

- 1 贯彻腐蚀控制工程全生命周期国家标准和国际标准草案
打好“三大攻坚战”和“三大保卫战”
/刘 轩

技术篇

【专论】

- 4 弯头外护管一次成型技术
/王 涵 张灵东
- 8 燃煤电厂二氧化碳捕集、利用和封存与“捕集预留”分析
/余子炎
- 11 WZ11-1N至WZ11-1A海底管道清管作业中腐蚀数据的
挖掘与分析
/张 峙 邹木森 赵杰瑛 胡徐彦 陶 涛

【经验交流】

- 17 非接触磁应力检测技术在油田集输管道缺陷检测的探索
和实践
/李金武 赵晓云 汪 罗 张智德 王晓强
- 22 董家口-平度管道交流干扰模拟计算及效果评价
/王 朋 张培洲 姜庆雷

- 28 铜镍合金注入管线渗漏问题原因分析及解决措施
/柯文超 芦新辉 赵德喜
- 31 气动阀合金阀瓣开裂原因分析
/李贵杰 骆云龙
- 36 川气东送安徽、浙沪段杂散电流干扰的检测与防护
/潘 晨
- 40 基于Monte Carlo法的腐蚀管道剩余寿命计算
/马树锋 王 勃 苏海平 李署英 何芸芸
- 44 电化学噪声技术评价316L不锈钢的晶间腐蚀敏感性
/张盈盈 赵玉飞 周 冰 张彦军 郭继银
- 49 储油罐防腐施工方法及施工质量控制的途径
/赵 军
- 51 城市给水管道的腐蚀控制技术分析
/康 磊
- 53 集输管线的腐蚀分析及防腐技术探讨
/张金麒
- 55 输油管道腐蚀原因分析及修复措施
/蔡 亮 陆 潇 李 涛 史雄威 赵利庆
- 58 市政混凝土排污管道防腐涂装技术研究
/刘显峰
- 61 原油沉降罐加热盘管防腐技术探讨
/任虎林
- 64 长效钛纳米聚合物涂料的防腐蚀防结垢性能及其应用
/朱兰芬 薛俊峰

71 油田地面管线施工管理存在的问题和解决对策

/毛 勇

74 油田地面工程系统信息化管理及应用探索

/刘畅游

77 油田地面工程管道防腐施工技术探析

/孔德鹏

79 油气田长输管道焊接质量控制策略探讨

/于 勇 李 论

82 提升回用水PH值减缓循环水系统腐蚀

/罗晗月

84 埋地供水管道的腐蚀及内外防腐措施探讨

/黄 贺

86 立式储罐安装中的焊接变形控制探讨

/韩嘉文

88 简化油田地面工程建设施工程序的措施分析

/李运军

90 电气设备静电防护及防腐问题分析

/杨鹏媛

93 采油生产的信息化管理措施

/初伟明

96 基于超高压的液压元件与管路密封方式研究

/夏士伟 宋尚杰

99 构建新一代油气管道智能完整性管理系统

/崔万祥 欧曙辉 刘严强

【腐蚀研究】

104 核电厂空气冷却器出口管道腐蚀穿孔原因分析

/周 澄 吴昉赟 赵卫东 刘洪群

109 油田地面工程施工中防腐技术应用分析

/巴显涛

111 油田地面工程管道防腐施工技术应用分析

/王 超

114 空调用钢衬铜管腐蚀失效分析

/赵 娜

116 公路桥梁混凝土中钢筋腐蚀检测方法分析

/王黎明

118 工业建筑的防腐和防火设计

/李 倩

120 高速公路桥梁施工中钢筋砼的腐蚀与维护的探讨

/张云爽

122 腐蚀管道剩余强度的确定及改造策略

/原 健

124 多类型缓蚀剂在H₂S/CO₂环境中的腐蚀性能研究

/田 宇 兰 旭

TOTAL CORROSION CONTROL

(Monthly)

Vol. 33 No.11 (Serial No. 236)

NOV 28, 2019

CONTENTS

• Works of CIATA •

Implement the National Standards and International Standard Committee Drafts of Corrosion Control Engineering Life Cycle do a Good Job in 'Three critical battles' and 'Three defense battles' LIU Xuan (1)

• Monograph •

One-shot Molding Technology for Elbow Outer Protective Tube WANG Han, ZHANG Ling-dong (4)
Coal-fired Power Plant Carbon Capture, Use and Storage and "Trap Set Aside" Analysis YU Zi-yan (8)
Excavation and Analysis of Corrosion Data in WZ11-1N to WZ11-1A Submarine Pipeline Cleaning Operation ZHANG Zhi, ZOU Mu-sen, ZHAO Jie-ying, HU Xu-yan, TAO Tao (11)

• Experience Exchange •

Field Practice of Non-Contact Magnetic Stress Inspection Technology on the Oil Gathering Pipeline LI Jin-wu, ZHAO Xiao-yun, WANG Luo, ZHANG Zhi-de, WANG Xiao-qiang (17)
Simulation Calculation and Mitigation Evaluation of AC Interference on Shandong LNG Pipeline WANG Peng, ZHANG Pei-zhou, JIANG Qing-lei (22)
Research Cause on Leakage Cu-Ni Alloy Injection Pipeline And Anti-corrosion Measurement KE Wen-chao, LU Xin-hui, ZHAO De-xi (28)
Cause Analysis of Pneumatic Valve Alloy Disc Cracking LI Gui-jie, LUO Yun-long (31)
East Gas Transmission Line Anhui/Zhehu Current Interference Detection and Prevention PAN Chen (36)
The Remaining Life Calculation of Corroded Pipelines Based on Monte Carlo Method MA Shu-feng, WANG Bo, SU Hai-ping, LI Shu-ying, HE Yun-yun (40)
Evaluation of Intergranular Corrosion Sensitivity of 316L Stainless Steel by Electrochemical Noise technique ZHANG Ying-ying, ZHAO Yu-fei, ZHOU Bing, ZHANG Yan-jun, GUO Ji-yin (44)
Antiseptic Construction Method of Oil Tank and Way of Construction Quality Control ZHAO Jun (49)
Analysis on Corrosion Control Technology of Urban Water Supply Pipeline KANG Lei (51)
Corrosion Analysis and anticorrosion Technology of gathering and Transportation Pipeline ZHANG Jin-qi (53)
Analysis and Treatment of Corrosion of Pipeline CAI Liang, LU Xiao, LI Tao, SHI Xiong-wei, ZHAO Li-qing (55)
Research on Antiseptic Painting Technology of Municipal Concrete Sewerage Pipeline LIU Xian-feng (58)
Discussion on Anti-corrosion Technology of Heating An Tube of Crude Oil Settling Tank REN Hu-lin (61)
Anti-corrosion and Anti-scaling Performance of Long-acting Titanium Pano-polymer Coating and Application ZHU Lan-fen, XUE Jun-feng (64)
Problems and Solutions to The Construction Management of Oilfield Surface Pipelines MAO Yong (71)
Information Management and Application Exploration of Oilfield Ground Engineering System LIU Chang-you (74)
Analysis on Anti-corrosion Construction Technology of Oilfield Ground Engineering Pipeline KONG De-peng (77)
Discussion on Welding Quality Control Strategy for Long-Distance Pipelines in Oil and Gas Fields YU Yong, LI Lun (79)
Improve the pH Value of Reuse Water and Slow Down the Corrosion of Circulating Water System LUO Han-yue (82)
Discussion on Corrosion of Buried Water Supply Pipeline and Internal and External Anti-Corrosion Measures HUANG He (84)
Discussion on Welding Deformation Control in Vertical Tank Installation HAN Jia-wen (86)
Analysis of Measures to Simplify the Construction Procedures of Oilfield Ground Engineering LI Yun-jun (88)
Analysis of Electrostatic Protection and Anti-corrosion of Electrical Equipment YANG Peng-yuan (90)
Information Management Measures for Oil Production CHU Wei-ming (93)
Study on the Sealing Mode of Hydraulic Components and Pipelines Based on Ultra-high Pressure XIA Shi-wei, SONG Shang-jie (96)
The New PIMS With IOT Big Data and Artificial Intelligencetechnology CUI Wan-xiang, OU Shu-hui, LIU Yan-qiang (99)

• Corrosion Research •

Corrosion Perforation Analysis of Outlet Pipe of Air Cooler in Nuclear Power Plant ZHOU Cheng, WU Fang-yun, ZHAO Wei-dong, LIU Hong-qun (104)
Application Analysis of Anticorrosion Technology in Surface Engineering Construction of Oil Field BA Xian-tao (109)
Application Analysis of Pipeline Anticorrosion Construction Technology in Surface Engineering of Oil Field WANG Chao (111)
Corrosion Failure Analysis of Steel-lined Copper Pipe for Air Onditioning ZHAO Na (114)
Analysis of Corrosion Detection Method of Reinforcement Bars in Highway Bridge Concrete WANG Li-ming (116)
Anti-corrosion and Fire Design of Industrial Buildings LI Qian (118)
Discussion on Corrosion and Maintenance of Reinforced Concrete in Construction of Expressway Bridges ZHANG Yun-shuang (120)
Determination of Residual Strength of Corroded Pipeline and Improvement Strategy YUAN Jian (122)
Study on Corrosion Performance of Various Corrosion Inhibitors in H₂S/CO₂ Environment TIAN Yu, LAN Xu (124)

Sponsored by China Industry Anticorrosion Technology Association (CIATA)

Edited and Published by the Editorial Department of TOTAL CORROSION CONTROL

Honorary Chairman of Editorial Committee: PAN Lian-sheng

Chairman of Editorial Committee: KE Wei

Editor in Chief: REN Zhen-duo (Concurrently)

Add: C-509, Yayunhaoting, No.9 Xiaoying Rd, Chaoyang Dist., Beijing, China

Post Code: 100101

Tel: (8610) 64896415 64896750

Fax: (8610) 64896415

Fixed Price: US\$ | 6.00

Web site: <http://www.ciata-tcc.com>