

- ◆ 《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

TOTAL CORROSION CONTROL



隆重庆祝

以中国智慧引领全球 筑起腐蚀控制钢铁长城

献礼中国共产党成立100周年

“中国工业防腐蚀技术协会”
更名为“中国腐蚀控制技术协会”



ISSN 1008-7818

9 771008 781147

万方数据

中国腐蚀控制技术协会主办



全面腐蚀控制杂志社出版

09

2021.VOL.35
1986年创刊·公开发行

全面腐蚀控制

CONTENTS 目次

技术篇

【专论】

- 1 埋地输气管道杂散电流干扰分析与防治措施
/李刚川
- 9 含硫集气站L245NS管线钢腐蚀规律与特征的研究
/延树龙 王少奇 张震 冯剑楠 尹志福
- 18 采用城市中水作为水源的化学水处理系统反渗透膜压差快速
上涨原因分析及清洗对策
/王弯弯 王竞一 刘晓冬 李珍珠 张旭

【经验交流】

- 25 长输管道机械损伤可接受标准探讨
/周亚单 应未 徐若语 祁庆芳 蒋玉卓 许小龙
- 28 油田基建工程施工中的环保措施分析
/高跃鹏
- 30 油田地面设备安装与集输管道的施工技术
/孙鑫
- 32 油田地面工程造价管理中的问题分析
/孙茗钰
- 34 油气管道焊接常见外观缺陷及预防措施
/于鲲鹏
- 36 浅析油田输油管道建设防腐施工措施
/赵伟
- 38 阳极分布对区域阴极保护效果的影响
/谢信军
- 42 10万方大型储油罐浮舱渗漏检修分析
/周利华 杜亮 何大喜 刘元涛 孟庆军

- 45 我国海上风电场中一种导管架阴极保护效果
模拟分析研究
/曲本文 朱帅帅 陈志强 张宇
- 49 头台油田1号加温加压站LNG备用气源研究
/赵亮
- 52 PCCP输水管线阴极保护应用实例及数值模拟验证
/王静 王善章 李威力
- 56 施工企业中工程造价管理常见问题及实践对策
/柏琳
- 58 区域供热热源配置方式的选择探讨
/李庆伟
- 60 某300MW锅炉结渣现象分析
/谢召祥 安冬冬 张本强 邢曜宇 张健 杨祖旺
- 63 埋地管道外防腐层不开挖检测与评价
/江锋
- 67 钢管管道三层聚乙烯结构的防腐质量控制策略
/马云娜
- 69 论标准化施工、样板化管理，促项目管理提升
/吕秋玲
- 72 地面油气集输容器内防腐施工及质量控制策略
/李世超
- 74 兰郑长YZ段管道交流干扰防护实践
/李军龙 徐雷 代小兵
- 79 聚合物驱注入井金属管道内腐蚀机理分析与
防护探讨
/张建军
- 83 建筑物空调管道的保温和防腐要求研究
/陈世军

- 85 储罐的内防腐设计及质量控制策略
/纪婉瑜
- 87 储罐罐底边缘板腐蚀的探讨
/侯力
- 89 核电厂重要厂用水管道杂散电流检测处理
/于雷 张福兵 孙风庆
- 92 海底管线非常规节点防腐补口施工技术探讨
/王洪洲 刘永利 王志业 杨加栋
岳文远 陈刚
- 96 国内外高等级管线钢管研发应用现状
/蔡亮 王风雷 左松奇 孙大为
- 100 石油石化机械设备的防腐检测技术分析
/管翠翠
- 102 蜡油加氢装置的腐蚀调查与分析
/傅蕾
- 106 长输管道防腐补口施工质量的数字化管理策略
/冯殿波
- 108 大型原油储罐安装质量控制探讨
/夏振东
- 110 油田含聚污水处理与利用方法探讨
/王闯
- 113 油气田地面集输碳钢管线腐蚀检测技术分析
/王春骞
- 115 油气管道防腐施工质量影响因素及控制对策探讨
/李双全
- 117 土木工程建筑设计中存在的问题分析
/王越
- 120 天然气管道法兰及螺栓包裹防腐施工管理探讨
/陈万勇
- 122 石油储罐焊接中需要注意的问题分析
/陈明
- 125 埋地金属管道的防腐设计与施工分析
/白杨
- 127 埋地钢质管道牺牲阳极保护检测及施工方法分析
/楚震
- 130 工程项目进度管理与进度控制措施探讨
/周长君
- 132 定向钻穿越中管道外防腐层的保护策略分析
/宋佳朋
- 135 大庆油田Y注CO₂试验区防腐工艺技术研究与应用
/陈涛
- 139 气液两相对科里奥利质量流量计计量精度的影响研究
/陈晓晨
- 【腐蚀研究】**
- 143 板式换热器的腐蚀分析与控制策略
/赵娜
- 145 油田注水管道腐蚀机理及防护措施分析
/张柏林
- 147 油田管道防腐技术的应用及策略分析
/辛陆
- 149 粘弹体在油气管道及储运设备防腐中的应用策略
/徐仲男
- 151 储罐防腐工程中防腐涂料的选择与应用策略
/吴敬轩
- 153 大港南部油区管线腐蚀因素分析及对策研究
/乔长青
- 155 油气集输管线防腐蚀技术应用
/柴畅
- 157 油田焊接钢质管道在线挤涂防腐的探讨
/安邦

TOTAL CORROSION CONTROL

(Monthly)

Vol. 35 No.09 (Serial No. 258)

SEP 28, 2021

CONTENTS

• Monograph •

Evaluation and Mitigation Measures of the Stray Current Interference in Buried Gas Pipeline.....	LI Gang-chuan (1)
Study on Corrosion Behavior and Characteristics of L245NS Pipeline Steel in Sulfur-containing Gas Gathering Station.....	YAN Shu-long, WANG Shao-qi, ZHANG Zhen, FENG Jian-nan, YIN Zhi-fu (9)
Cause Analysis and Cleaning Countermeasures of Rapid Rise of Pressure Difference of Urban Reclaimed Water Reverse Osmosis Membrane in Chemical Water Treatment System.....	WANG Wan-wan, WANG Jing-yi, LIU Xiao-dong, LI Zhen-zhu, ZHANG Xu (18)

• Experience Exchange •

Discussion on Acceptable Standard of Mechanical Damage of Long Distance Pipeline.....	ZHOU Ya-chan, YING Wei, XU Ruo-yu, QI Qing-fang, JIANG Yu-zhuo, XU Xiao-long (25)
Analysis of Environmental Protection Measures in the Construction of Oilfield Infrastructure Projects.....	GAO Yue-peng (28)
Oilfield Surface Equipment Installation and Gathering Pipeline Construction Technology.....	SUN Xin (30)
Analysis of Problems in Cost Management of Oilfield Surface Engineering.....	SUN Ming-yu (32)
Common Appearance Defects and Preventive Measures in Welding of Oil and Gas Pipelines.....	YU Kun-peng (34)
Analysis on Anti-corrosion Measures of Oil Pipeline Construction in Oilfield.....	ZHAO Wei (36)
Influence of Anode Distribution on Regional Cathodic Protection.....	XIE Xin-jun (38)
Leakage Maintenance Analysis of Floating Cabin of 100000 m ³ Large Oil Storage Tank.....	ZHOU Li-hua, DU Ljiang, HE Da-xi, LIU Yuan-tao, MENG Qing-jun (42)
Simulation Analysis and Research on Cathodic Protection Effect of Jacket in my Country's Offshore Wind Farm.....	QU Ben-wen, ZHU Shuai-shuai, CHEN Zhi-qiang, ZHANG Yu (45)
Study on LNG Standby Gas Source of No. 1 Heating and Pressuring Station in Toutai Oilfield.....	ZHAO Liang (49)
Application Example of Cathodic Protection for PCCP Water Pipeline and Numerical Simulation Verification.....	WANG Jing, WANG Shan-zhang, LI Wei-li (52)
Common Problems and Practical Countermeasures of Project Cost Management in Construction Enterprises.....	BAI Lin (56)
Discussion on the Selection of District Heating Source Allocation Mode.....	LI Qing-wei (58)
The Slagging Analysis on a 300MW Boiler.....	XIE Zhao-xiang, AN Dong-dong, ZHANG Ben-qiang, XING Yao-yu, ZHANG Jian, YANG Zu-wang (60)
Indirect Nondestructive Test and Evaluation of External Anticorrosion Coating of Buried Pipelines.....	JIANG Feng (63)
Anti Corrosion Quality Control Strategy for Three-layer Polyethylene Structure of Steel Pipeline.....	MA Yun-na (67)
On Standardized Construction and Model Management to Promote Project Management.....	LV Qiu-ling (69)
Anti Corrosion Construction and Quality Control Strategy of Surface Oil and Gas Gathering and Transportation Container.....	LI Shi-chao (72)
Pipeline Protection of AC Interference Practice in YZ Section of Lanzhou-zhengzhou-changsha Pipeline.....	LI Jun-long, XU Lei, DAI Xiao-bing (74)
Analysis of Corrosion Mechanism and Protective Measures in Metal Pipeline of Polymer Flooding Injection Well.....	ZHANG Jian-jun (79)
Research on Insulation and Anti-corrosion Requirements of Building Air-Conditioning Pipes.....	CHEN Shi-jun (83)
Internal Corrosion Protection Design and Quality Control Strategy of Storage Tank.....	JI Wan-yu (85)
Discussion on Corrosion of Tank Bottom Edge Plate.....	HOU Li (87)
Detection and Treatment of Stray Current in Pipe, Essential Service Water, Nuclear Power Plant.....	YU Lie, ZHANG Fu-bing, SUN Feng-Qing (89)
Discussion on Offshore Pipeline Special Field Joint Coating Application Technology.....	WANG Hong-zhou, LIU Yong-li, WANG Zhi-ye, YANG Jia-dong, YUE Wen-yuan, CHEN Gang (92)
Research and Application Status of High Grade Line Pipe at Home and Abroad.....	CAI Liang, WANG Feng-lei, ZUO Song-qi, SUN Da-wei (96)
Analysis of Anticorrosion Detection Technology for Petroleum and Petrochemical Machinery and Equipment.....	GUAN Cui-cui (100)
Corrosion Investigation and Analysis of Wax Oil Hydrogenation Unit.....	FU Qiang (102)
Digital Management Strategy for Construction Quality of Long Distance Pipeline Anticorrosion and Joint Repair.....	FENG Dian-bo (106)
Discussion on Installation Quality Control of Large Crude Oil Storage Tanks.....	XIA Zhen-dong (108)
Discussion on Treatment and Utilization of Polymer Containing Wastewater in Oilfield.....	WANG Chuang (110)
Analysis of Corrosion Detection Technology for Surface Gathering and Transportation Carbon Steel Pipeline in Oil and Gas Field.....	WANG Chun-qian (113)
Discussion on Influencing Factors and Control Countermeasures of Anti-Corrosion Construction Quality of Oil and Gas Pipeline.....	LI Shuang-quan (115)
Analysis of Problems Existing in Structural Design of Civil Engineering Buildings.....	WANG Yue (117)
Discussion on Anti-Corrosion Construction Management of Flange and Bolt Wrapping of Natural Gas Pipeline.....	CHEN Wan-yong (120)
Analysis of Problems Needing Attention in Oil Tank Welding.....	CHEN Ming (122)
Anti Corrosion Design and Construction Analysis of Buried Metal Pipeline.....	BAI Yang (125)
Detection and Construction Method Analysis of Sacrificial Anode Protection for Buried Steel Pipeline.....	CHU Zhen (127)
Discussion on Project Schedule Management and Schedule Control Measures.....	ZHOU Chang-jun (130)
Analysis on Protection Strategy of External Anti-corrosion Coating of Pipeline in Directional Drilling Crossing.....	SONG Jia-peng (132)
Research and Application of Anticorrosion Technology in y-CO ₂ Injection Test area of Daqing Oilfield.....	CHEN Tao (135)
Influence of Gas-liquid Two-phase Flow on Measurement Accuracy of Coriolis Mass Flowmeter.....	CHEN Xiao-chen (139)

• Corrosion Research •

Corrosion Analysis and Control Strategy of Plate Heat Exchanger.....	ZHAO Na (143)
Analysis of Corrosion Mechanism and Protective Measures of Oil Field Water Injection Pipeline.....	ZHANG Bo-lin (145)
Application and Strategy Analysis of Oilfield Pipeline Anticorrosion Technology.....	XIN Lu (147)
Application Strategy of Viscoelastic Body in Anticorrosion of Oil and Gas Pipeline and Storage and Transportation Equipment.....	XU Zhong-nan (149)
Selection and Application Strategy of Anticorrosive Coatings in Tank Anticorrosion Engineering.....	WU Jing-xuan (151)
Corrosion Factor Analysis and Countermeasure Study of Pipelines in Dagang Southern Oil Area.....	QIAO Chang-qing (153)
Application of Anticorrosion Technology for Oil and Gas Gathering and Transportation Pipeline.....	CHAI Chang (155)
Discussion on on Line Extrusion Coating Anticorrosion of Oilfield Welded Steel Pipeline.....	AN Bang (157)

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>