



# 全面腐蚀控制

唯君题



## 以中国智慧引领全球 筑起腐蚀控制钢铁长城

“中国工业防腐蚀技术协会”更名为“中国腐蚀控制技术协会”



# 全面腐蚀控制

## CONTENTS 目次

### 技术篇

#### 【专论】

##### 1 火力发电厂水资源智慧调控与运营

/袁弘 孙利 刘政修 汤自强 梁浩

赵潇然 梁国杰

##### 13 山地管道安全状态识别与监测技术应用研究

/陈哲

##### 19 乙烯基酯树脂玻璃钢在硫酸铵废水碳钢储罐内

防腐的应用

/肖培胜

#### 【经验交流】

##### 25 长输管道防腐补口失效分析及技术进展

/孙典昊 王宏召 牛志勇 张凯灵 刘锋

##### 28 探讨玻璃纤维在石墨制化工装备上的应用技术

/赵雪松 陈小峰 刘畅 刘仍礼

##### 31 天然气集输系统中液相危害及解决方案探析

/刘国振

##### 33 油气储运过程中常见问题与应对措施分析

/惠苗苗

##### 36 浅谈海洋工程质量管理

/辛娟 辛俊

万方数据

##### 40 汽车板清洁防锈包装现状与发展趋势

/张顺 唐艳秋

##### 45 电磁超声不同线圈选型数值模拟分析

/齐光峰 王安泉 杨超 王凯 王凯月

##### 50 防腐管材在油田集输工程中的运用分析

/崔若冰 唐振楠

##### 52 市政给排水规划与设计常见问题

/王梓轩

##### 54 浅析建筑设计中的问题与对策

/赵云云

##### 56 采油污水回用深度处理技术分析

/付馨

##### 58 600MW亚临界汽包炉给水腐蚀氧化技术研究

/张久龙 吴利宁 刘忠 杨金生

##### 64 地铁钢轨纵向电阻对地铁杂散电流的仿真分析

/范美琪 孙燕盈 马志强 胡志明 郭思琦

##### 69 油田集输系统生产运行参数优化探讨

/赵政涛

##### 71 油田地面建设工程施工的质量监督管理探讨

/程相禹

##### 74 油田地面工程管道防腐施工技术应用

/沈旭

- 76 油气田地面工程建设施工现状及其管理重点分析  
/刘 冰
- 79 阴极防腐保护远传远控智能系统现场试验  
/俞博洋
- 83 抑制油田微生物腐蚀的现状与发展趋势  
/温 雪
- 85 污水处理厂设备防腐管理存在的问题及改进  
/赵志慧
- 87 强化工程现场监督提升工程建设质量  
/贲 放
- 90 电气仪表安装施工的几点建议  
/孙竟皓
- 92 道路桥梁工程的常见病害与施工处理技术分析  
/岳洪兴
- 【腐蚀研究】**
- 95 油田集输管线防腐技术及应用研究  
/于 阳
- 97 海洋风电导管架腐蚀防护典型案例研究  
/赵 帅 卫旭敏 张剑明 邓 凯
- 102 联合站污水处理系统的腐蚀因素与防护策略  
/陈立春
- 104 钢结构的腐蚀机理及防护工艺  
/张英杰
- 106 316L不锈钢在CO<sub>2</sub>/油/水环境中的腐蚀速率分析  
/吴鹏举 石秀秀 胡岐川 马晓宇 刘 帅  
张体田 郭兴建
- 110 输油输气生产现场中的管道防腐问题分析  
/王兆智
- 112 锅炉水冷壁防腐蚀技术应用  
/甘 露
- 114 油田地面集输管线腐蚀因素及防腐措施探讨  
/李 雪
- 116 工业建筑防腐蚀工程技术措施探讨  
/鄂志国
- 118 水性防腐涂料在石油管道及设备中的运用  
/于海佳
- 120 天然气净化装置腐蚀行为与防护措施  
/任 健
- 122 埋地油气混输管道的腐蚀机理与防护策略  
/王 冰
- 124 埋地输油管道盗油孔防腐蚀策略  
/赵鹏举
- 126 输油管线腐蚀检测与防护策略  
/刘 桐
- 128 盐渍土地区地基处理及基础防腐应用策略  
/孙佳星
- 130 成品油管道防腐措施  
/高 涵
- 132 油田大型储罐的防腐措施  
/刘也铭
- 134 L245NS钢在不同含硫条件下腐蚀特性与缓蚀  
行为研究  
/程卓越 杨超超 康振乐 尹志福  
杜美玲 易志超

# TOTAL CORROSION CONTROL

(Monthly)

Vol. 36 No.03 (Serial No. 264)

MAR 28, 2022

## CONTENTS

### • Monograph •

Intelligent Control and Operation of Water Resource in Thermal Power Plant	
..... YUAN Hong, SUN Li, LIU Zheng-xiu, TANG Zi-qiang, LIANG Hao, ZHAO Xiao-ran, LIANG Guo-jie (1)	
Research on Application of Safety State Recognition and Monitoring Technology for Mountainous Pipelines	..... CHEN Zhe (13)
The Application of Vinyl Ester Resin FRP in Anticorrosion of Inner Wall of Carbon Steel Tank for Ammonium Sulfate Wastewater	..... XIAO Pei-sheng (19)

### • Experience Exchange •

Failure Analysis and Technical Progress of Anti-corrosion Joint Coating of Long Distance Pipeline	..... SUN Dian-hao, WANG Hong-zhao, Niu Zhi-yong, ZHANG Kai-ling, LIU Feng (25)
The Application of Fiberglass in Graphite Chemical Equipment	..... ZHAO Xue-song, CHEN Xiao-feng, LIU Chang, LIU Reng-li (28)
Analysis on Liquid Phase Hazard and Solution in Natural Gas Collection and Transmission System	..... LIU Guo-zhen (31)
Analysis of Common Problems and Response Measures in Oil and Gas Storage and Transportation	..... HUI Miao-miao (33)
Discussion on Quality Management of Ocean Engineering	..... XIN Juan, XIN Jun (36)
The Development And Trend of Clean Packaging on Automobile Plates	..... ZHANG Shun, TANG Yan-qiu (40)
Analysis of Different Coil Selection in Electromagnetic Ultrasound Using Numerical Simulation	..... QI Guang-feng, WANG An-quan, YANG Chao, WANG Kai, WANG Kai-yue (45)
Application Analysis of Anticorrosive Pipe in Oilfield Gathering and Transportation Engineering	..... CUI Ruo-bing, TANG Zhen-nan (50)
Discussion on Common Problems of Municipal Water Supply and Drainage Planning and Design	..... WANG Zi-xuan (52)
Analysis of Problems and Countermeasures in Architectural Structure Design	..... ZHAO Yun-yun (54)
Analysis of Advanced Treatment Technology for Oil Wastewater Reuse	..... FU Xin (56)
Study on Feed Water Corrosion and Oxidation Technology of 600MW Subcritical Drum Boiler	..... ZHANG Jiu-long, WU Li-ning, LIU Zhong, YANG Jin-sheng (58)
Longitudinal Resistance of Subway Rails to Subway Stray Current Simulation Analysis	..... FAN Mei-qi, SUN Yan-ying, MA Zhi-qiang, HU Zhi-ming, GUO Si-qi (64)
Discussion on Optimization of Production and Operation Parameters of Oilfield Gathering and Transportation System	..... ZHAO Zheng-tao (69)
Discussion on Quality Supervision and Management of Oilfield Surface Construction Engineering Construction	..... CHENG Xiang-yu (71)
Application of Pipeline Anti-corrosion Construction Technology in Oilfield Surface Engineering	..... SHEN Xu (74)
Analysis on Construction Status and Management Focus of Oil and Gas Field Surface Engineering	..... LIU Bing (76)
Field Test of Remote Transmission and Remote Control Intelligent System for Cathodic Anti-corrosion Protection	..... YU Bo-yang (79)
Present Situation and Development Trend of Inhibiting Microbial Corrosion in Oil Field	..... WEN Xue (83)
Problems and Improvement of Equipment Anti-corrosion Management in Sewage Treatment Plant	..... ZHAO Zhi-hui (85)
Strengthening Project Site Supervision and Improving Project Construction Quality	..... BEN Fang (87)
Some Suggestions on the Installation and Construction of Electrical Instruments	..... SUN Jing-hao (90)
Analysis on Common Diseases and Construction Treatment Technology of Road and Bridge Engineering	..... YUE Hong-xing (92)

### • Corrosion Research •

Research on Anti-corrosion Technology and Application of Oilfield Gathering Pipeline	..... YU Yang (95)
Typical Corrosion Control Case of Offshore Wind Power Jacket	..... ZHAO Shuai, WEI Xu-min, ZHANG Jian-ming, DENG Kai (97)
Corrosion and Protection Strategy of Sewage Treatment System in Combined Station	..... CHEN Li-chun (102)
Corrosion Mechanism and Protection Technology of Steel Structure	..... ZHANG Ying-jie (104)
Corrosion Rate Analysis of 316L Steel in CO <sub>2</sub> /Oil/Water Environment	..... WU Peng-ju, SHI Xiu-xiu, HU Qi-chuan, MA Xiao-yu, LIU Shuai, ZHANG Ti-tian, GUO Xing-jian (106)
Analysis of Pipeline Anticorrosion in Oil and Gas Production Site	..... WANG Zhao-zhi (110)
Application of Anticorrosion Technology for Boiler Water Wall	..... GAN Lu (112)
Discussion on Corrosion Anti-Corrosion and Transporting Pipelines in Oil Field	..... LI Xue (114)
Discussion on Anti-Corrosion Engineering Technical Measures of Industrial Buildings	..... E Zhi-guo (116)
Application of Waterborne Anticorrosive Coatings in Petroleum Pipelines and Equipment	..... YU Hai-jia (118)
Corrosion Behavior and Protection Measures of Natural Gas Purification Unit	..... REN Jian (120)
Corrosion Mechanism and Protection Strategy of Buried Oil and Gas Pipelines	..... WANG Bing (122)
Anti Corrosion Strategy of Oil Stealing Hole in Buried Oil Pipeline	..... ZHAO Peng-ju (124)
Corrosion Detection and Protection Strategy of Oil Pipeline	..... LIU Tong (126)
Application Strategy of Foundation Treatment and Foundation Anticorrosion in Saline Soil Area	..... SUN Jia-xing (128)
Anticorrosion Measures for Product Oil Pipeline	..... GAO Han (130)
Anticorrosion Measures for Large Oil Tank	..... LIU Ye-ming (132)
Corrosion Characteristics and Inhibition Behavior of L245NS Steel under Different Sulfur Conditions	..... CHENG Zhuo-yue, YANG Chao-chao, KANG Zhen-le, YIN Zhi-fu, DU Mei-ling, YI Zhi-chao (134)

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>