

- ◆ 《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

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”



ISSN 1008-7818



中国腐蚀控制技术协会主办



全面腐蚀控制杂志社出版

09

2022.VOL.36

1986年创刊·公开发行

全面腐蚀控制

CONTENTS 目次

技术篇

【专论】

- 1 沿海地区钢结构件多元金属热扩渗长效防腐技术
/任玉中 李康宁 王玉环 刘兴智
- 7 压水堆核电站联氨减量化研究现状综述
/刘灿帅 肖艳 林根仙 宋利君
- 13 某核电厂定位弹簧销钉失效原因分析
/胡苾尹 骆抗 乔泽 王仪美
- 19 低温形变马氏体对奥氏体不锈钢腐蚀敏感性影响研究
/于宇新 龚陈俊 周天宇 白学刚 刘文
李运涛 刘嘉晨

【经验交流】

- 28 输油管道山区施工技术分析
/赵雅娟
- 30 信息化手段在降低原油集输能耗中的应用
/冯艳 李国民 刘新丽
- 32 输油气站场完整性管理与关键技术应用
/张博文
- 34 输油泵在油气集输系统中的应用
/张宗科 代龙兴
- 36 热电厂锅炉水冷壁管失效原因探究
/黄斌鑫

- 39 浅谈新形势下长输管道项目如何开展油耗控制
工作
/王迪
- 41 高寒地区油田工程道路选线设计与施工策略
/戚大伟
- 43 镁阳极常规试验与加速试验对比研究
/李杰 刘波麟 唐菊 刘彬彬
蔡霞 张楠
- 47 阴极保护在埋地钢质管道的应用
/潘宗江 杨威 韩毅 张毅泽
胡波 田野
- 50 石墨制化工装置自控仪表工程施工质量控制分析
/刘仍礼
- 53 钢骨架塑料复合管焊渣清除装置设计与运用
/陈同山
- 56 地面设备安装及集输管道施工研究
/张荣明
- 58 强化油田基建工程施工安全管理的有效途径探析
/王白石
- 60 油田基建工程施工中的环保措施探讨
/汪洋
- 63 无损探伤技术在钢结构检测中的应用探讨
/赵耀

CONTENTS

目次

- 66 天然气管网工程施工技术管理分析
/陈凯旋
- 69 浅析土木工程地基加固技术
/付忠敏
- 71 汽车机械的维修保养技巧探讨
/陈立男
- 74 苯乙烯装置脱氢进料汽化器泄漏原因分析
/郝新焕
- 【腐蚀研究】**
- 80 架空燃气管道防腐技术分析
/郑超
- 82 石油管道防腐中的问题以及措施
/赵飞霖
- 84 混凝土结构的耐久性及其防腐施工技术分析
/于海亮
- 86 油气管道完整性管理效能评价技术分析
/尹升
- 88 油气田在役埋地管道腐蚀与防腐控制技术分析
/薛志军
- 90 石油化工管道防腐技术分析
/冉允军
- 92 燃气锅炉烟气腐蚀治理
/朱亮
- 94 输油管道防腐技术存在问题及措施
/马岭
- 96 炼油催化油浆泵冲刷腐蚀原因分析及修复
/马兴国 张云来 杜亮 周利华
- 101 油田地面工程管道腐蚀成因分析及施工技术
/李冬
- 103 混凝土中钢筋的腐蚀防护技术研究
/侯静
- 106 高含硫天然气净化装置在线腐蚀监测系统优化
/李煌
- 110 储罐底板防腐涂层性能分析
/王思杨 杨玉峰 周洋
- 114 建筑施工中的钢结构防腐方法之研究
/姜涛
- 116 油气集输管道的腐蚀机理分析与防腐措施探究
/朱富有
- 118 脉冲涡流技术在保温层下管道腐蚀检测的应用
研究
/何婷婷 冯翠宁 韩雪艳 闫化云
- 124 油气集输管道完整性管理关键技术探讨
/郝郁 汪相逢 尹航 万国英
党丽 李振新

TOTAL CORROSION CONTROL

(Monthly)

Vol. 36 No.09 (Serial No. 270)

SEP 28, 2022

CONTENTS

• Monograph •

Long-Term Anti-Corrosion Technology of Multi-Metal Thermal Diffusion Infiltration of Steel Structures in Coastal Areas	REN Yu-zhong, LI Kang-ning, WANG Yu-huan, LIU Xing-zhi (1)
Review on Hydrazine Reduction in Pressurized Water Reactor Nuclear Power Plant	LIU Can-shuai, XIAO Yan, LIN Gen-xian, SONG Li-jun (7)
Failure Analysis of Spring Pin in A Nuclear Power Plant	HU Ning-yin, LUO Kang, QIAO Ze, WANG Yi-mei (13)
Influence of Low Temperature Deformed Martensite on Corrosion Susceptibility of Austenitic Stainless Steel	YU Yu-xin, GONG Chen-jun, ZHOU Tian-yu, BAI Xue-gang, LIU Wen, LI Yun-tao, LIU Jia-chen (19)

• Experience Exchange •

Analysis on Construction Technology of Oil Pipeline in Mountainous Area	ZHAO Ya-juan (28)
Application of Information Technology Crude Oil Gathering and Transportation	FENG Yan, LI Guo-min, LIU Xin-li (30)
Integrity Management of Oil and Application of Key Technologies	ZHANG Bo-wen (32)
Application of Oil Transport Pump in Oil and Gas Gathering and Transportation System	ZHANG Zong-ke, DAI Long-xing (34)
Failure Analysis of Boiler Water Wall Tube in Thermal Power Plant	HUANG Bin-xin (36)
How to Carry Out Fuel Consumption Control in Long-distance Pipeline Projects Under the New Situation	WANG Di (39)
Route Selection Design and Construction Strategy of Oilfield Engineering in Alpine Area	QI Da-wei (41)
The Comparative Study of Magnesium Anode's Conventional Test And Accelerated Test	LI Jie, LIU Bo-lin, TANG Ju, LIU Bin-bin, CAI Xia, ZHANG Nan (43)
Application of Cathode Protection in Buried Steel Pipeline	PAN Zong-jiang, YANG Wei, HAN Yi, ZHANG Yi-ze, HU Bo, TIAN Ye (47)
Quality Control Analysis of Automatic Instrument Construction for Graphite Chemical Device	LIU Reng-li (50)
Welding Slag Removing Device of Steel Skeleton Polyethylene Pipe Designed and Applied	CHEN Tong-shan (53)
Study on Installation of Ground Equipment and Construction of Gathering Pipeline	ZHANG Rong-ming (56)
Effective Ways to Strengthen The Construction Safety Management of Oilfield Capital Construction Projects	WANG Bai-shi (58)
Discussion on Environmental Protection Measures in Construction of Oil Field Infrastructure Project	WANG Yang (60)
Application of Nondestructive Testing Technology in Steel Structure Testing	ZHAO Yao (63)
Analysis on Construction Technology Management of Natural Gas Pipeline Network Project	CHEN Kai-xuan (66)
Analysis on Foundation Strengthening Technology of Civil Engineering	FU Zhong-min (69)
Discussion on Maintenance Skills of Automobile Machinery	CHEN Li-nan (71)
Analysis on Leakage of Feed Vaporizer for Dehydrogenation in Styrene Plant	HAO Xin-huan (74)

• Corrosion Research •

Analysis on Anti-corrosion Technology of Overhead Gas Pipeline	ZHENG Chao (80)
Problems and Measures in Oil Pipeline Anticorrosion	ZHAO Fei-lin (82)
Analysis of Durability and Anti-corrosion Construction Technology of Concrete Structure	YU Hai-liang (84)
Technical analysis of Oil and Gas Management Efficiency Evaluation	YIN Sheng (86)
Analysis on Corrosion and Anti-corrosion Control Technology of Buried Pipeline in Service in Oil and Gas Field	XUE Zhi-jun (88)
Analysis on Anticorrosion Technology of Petrochemical Pipeline	RAN Yun-jun (90)
Gas Boiler Flue Gas Corrosion Control	ZHU Liang (92)
Problems and Measures of Anti-corrosion Technology for Oil Pipeline	MA Ling (94)
Analysis and Repair of the Causes of Erosion Corrosion By Refining Catalytic Slurry Pumps	MA Xing-guo, ZHANG Yun-lai, DU Liang, ZHOU Li-hua (96)
Cause Analysis and Construction Technology of Pipeline Corrosion in Oilfield Surface Engineering	LI Dong (101)
Research on Corrosion Protection Technology of Steel Bars in Concrete	HOU Jing (103)
Optimization of On-line Corrosion Monitoring System for High Sulfur Natural Gas Purification Unit	LI Huang (106)
Analysis of The Performance of Anti-corrosion Coating for Base Plate of Storage Tank	WANG Si-yang, YANG Yu-feng, ZHOU Yang (110)
Research on Anti-corrosion Method of Steel Structure in Building Construction	JIANG Tao (114)
Corrosion Mechanism Analysis and Anti-corrosion Measures of Oil and Gas Gathering and Transportation Pipelines	ZHU Fu-you (116)
Application of Pulse Eddy Current Technology in Pipeline Corrosion Detection under Insulation Layer	HE Ting-ting, FENG Cui-ning, HAN Xue-yan, YAN Hua-yun (118)
Discussion on Key Technologies of Integrity Management of Oil and Gas Gathering and Transmission Pipeline	HAO Yu, WANG Xiang-feng, YIN Hang, WAN Guo-ying, DANG Li, LI Zhen-xin (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>