

全国中文核心期刊
中国科技核心期刊

ISSN 1002-3364
CN 61-1111/TM
CODEN RFEAC8

THERMAL POWER GENERATION

热力发电

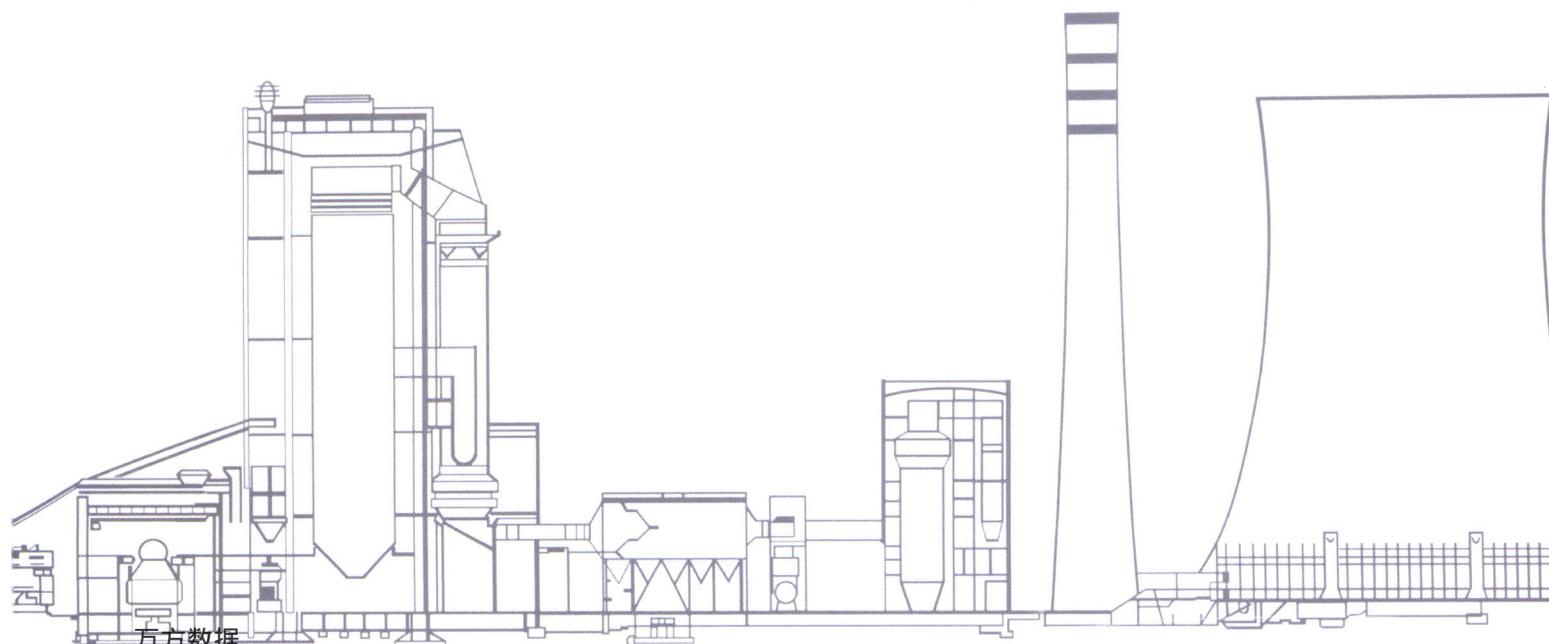
2018.10

总第383期
1972年创刊
第47卷

■ 主办：西安热工研究院有限公司 中国电机工程学会



QK1850751



CONTENTS

目 次

污 染 物 排 放 控 制

- 01 生物质锅炉脱硝技术及工程应用//周建强, 高 攀, 董长青, 杨勇平
06 含氮低热值气体燃烧 NO_x排放特性研究//涂汉超, 余春江, 解桂林, 刘晓蕊
12 基于长短期记忆神经网络的火电厂 NO_x排放预测模型//杨国田, 张 涛, 王英男, 李新利, 刘 禾
18 含灰烟气循环煤粉富氧燃烧中超细颗粒物生成特性研究
//尹国明, 刘有飞, 夏永俊, 刘汉金, 刘念平, 邹 仁
24 SCR 脱硝催化剂低负荷运行评估技术研究与应用
//王乐乐, 何 川, 王 凯, 潘 力, 熊加林, 孔凡海, 宋玉宝, 雷嗣远
31 燃煤电厂选择性催化还原脱硝催化剂砷中毒分析//姚 燕, 王乐乐, 李乐田, 马云龙, 刘晓敏, 柳晨清
37 燃气轮机污染物排放影响因素相关性分析//肖俊峰, 李晓丰, 胡孟起, 王 玮, 王 峰

热 能 科 学 研 究

- 44 氢体积分数对甲烷-氢贫燃预混钝体火焰燃烧不稳定性影响//王明晓, 邓 凯, 王炜豪, 钟英杰
51 螺旋管圈内螺纹管内上母线处超临界水传热关联式建立//郭宇朦, 李会雄
58 吹风比对涡轮叶片尾缘气膜冷却效率影响//李广超, 于全朋, 张 魏, 寇志海
66 一种新型迷宫式调节阀流场特性分析//董学莲, 罗 皓, 周 荣, 廖佳敏, 费 凌
73 烟气脱硝逃逸氨的迁移转化及其对脱硫废水处理的影响//叶春松, 操 容, 高 煜, 王正林, 郑 伟

发 电 技 术 论 坛

- 78 火电机组协调控制系统前馈控制逻辑设计//刘海喆, 田 亮
84 一种智能型氢电导率测量方法研究及应用//田 利, 戴 鑫, 陈裕忠, 刘 瑞, 周 潮, 张龙明, 王 平
90 200 MW 机组蒸汽旁路热电解耦能力评估//黄嘉驷, 刘永林, 付亦威, 王 伟, 徐海涛, 居文平
96 直接空冷机组最佳经济背压优化//梁伟平, 张金帅
103 基于工业供汽的给水泵背压式汽轮机驱动方案热经济性分析
//王 勇, 叶 军, 林 琳, 周 刚, 刘伟廷
108 深度调峰负荷时亚临界自然循环锅炉水循环安全计算与分析
//马玉华, 邢长清, 徐君诏, 聂 鑫, 张广才, 柳宏刚, 杨 冬
115 推力轴承对汽轮机径向振动的耦合分析//何国安, 刘永民, 杨金星, 晋树伶, 张学延
120 矿井乏风对锅炉燃烧特性影响//高 杰, 蔡 晋, 乔晓磊, 金 燕
127 新型给水自动加氧设备性能分析及应用//谢宙桦, 黄万启, 张洪博, 高文锋, 戴 旭, 刘铁勇, 齐 超
132 锅炉烟气脱硝尿素热解炉催化水解节能改造//吴 岩, 杨天明
137 一种适用于三排气机组的双工质冷却高背压供热技术及其应用
//余小兵, 蒋建平, 安 珂, 高 庆, 谷伟伟, 宫玉柱, 曹敬国
142 某型核电汽轮机凝汽器半侧运行分析//陈自强, 杨 璇

THERMAL POWER GENERATION

CONTENTS

Pollutants control technology

- Denitrification technology of biomass boilers and its engineering application ZHOU Jianqiang, GAO Pan, DONG Changqing, YANG Yongping(1)
- Study on NO_x emission characteristics of the combustion of nitrogen-containing low calorific value gas TU Hanchao, YU Chunjiang, XIE Guilin, LIU Xiaorui(6)
- Prediction model for NO_x emissions from thermal power plants based on long-short-term memory neural network YANG Guotian, ZHANG Tao, WANG Yingnan, LI Xinli, LIU He(12)
- Formation characteristics of ultra fine particles during oxy-coal combustion with flue gas recirculation YIN Guoming, LIU Youfei, XIA Yongjun, LIU Hanjin, LIU Nianping, ZOU Ren(18)
- Research and application of low-load operation evaluation technology for SCR catalysts WANG Lele, HE Chuan, WANG Kai, PAN Li, XIONG Jialin, KONG Fanhai, SONG Yubao, LEI Siyuan(24)
- Arsenic deactivation of honeycomb SCR catalysts in coal-fired power plants YAO Yan, WANG Lele, LI Letian, MA Yunlong, LIU Xiaomin, LIU Chenqing(31)
- Correlation analysis on influencing factors of pollutants emission from a heavy-duty gas turbine XIAO Junfeng, LI Xiaofeng, HU Mengqi, WANG Wei, WANG Feng(37)

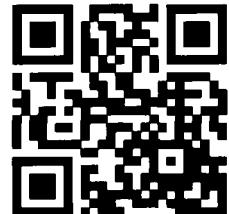
Thermal energy science research

- Effects of hydrogen volume fraction on combustion instability of methane-hydrogen lean premixed bluff-body flame WANG Mingxiao, DENG Kai, WANG Weihao, ZHONG Yingjie(44)
- Establishment of heat transfer correlation to the supercritical water flow on the top of cross section in spiral wall with internal rib GUO Yumeng, LI Huixiong(51)
- Effect of blowing ratio on film cooling efficiency of trailing edge on turbine blade LI Guangchao, YU Quanpeng, ZHANG Wei, KOU Zhihai(58)
- Analysis on flow field characteristics of a new type of labyrinth control valve DONG Xuelian, LUO Hao, ZHOU Rong, LIAO Jiamin, FEI Ling(66)
- Migration and conversion of ammonia escaped from flue gas denitrator and its effect on treatment of desulfurization wastewater YE Chunsong, CAO Rong, GAO Liao, WANG Zhenglin, ZHENG Wei(73)

Power generation technology forum

- Design of feed-forward control logic of coordinated control system of thermal power units LIU Haizhe, TIAN Liang(78)
- Research and application of an intelligent hydrogen conductivity measurement method TIAN Li, DAI Xin, CHEN Yuzhong, LIU Wei, ZHOU Chao, ZHANG Longming, WANG Ping(84)
- Thermo-electricity decoupling capacity evaluation of steam bypass for a 200 MW power unit HUANG Jiasi, LIU Yonglin, FU Yiwei, WANG Wei, XU Haitao, JU Wenping(90)
- Optimization of the optimal economic back pressure for direct air-cooling units LIANG Weiping, ZHANG Jinshuai(96)
- Thermal economy research on back pressure turbine-driven scheme for feed water pumps based on industrial steam supply WANG Yong, YE Jun, LIN Lin, ZHOU Gang, LIU Weiting(103)
- Safety calculation and analysis for thermal-hydraulic circulation of a subcritical natural circulation boiler at severe peak load regulation MA Yuhua, XING Changqing, XU Junzhao, NIE Xin, ZHANG Guangcai, LIU Honggang, YANG Dong(108)
- Analysis on the coupling effect of thrust bearing on the radial vibration of steam turbine HE Guoan, LIU Yongmin, YANG Jinxing, JIN Shuling, ZHANG Xueyan(115)
- Effect of mine ventilation air methane on combustion characteristics of a coal-fired boiler GAO Jie, CAI Jin, QIAO Xiaolei, JIN Yan(120)
- Performance analysis and application of a novel feedwater automatic oxygenation equipment XIE Zhouhua, HUANG Wanqi, ZHANG Hongbo, GAO Wenfeng, DAI Xu, LIU Tieyong, QI Chao(127)
- Energy saving reformation for catalytic hydrolysis of boiler flue gas denitrification urea pyrolysis furnace WU Yan, YANG Tianming(132)
- A high back pressure heating technology based on duplex cooling and its application for three-exhaust unit YU Xiaobing, JIANG Jianping, AN Ke, GAO Qing, GU Weiwei, GONG Yuzhu, CAO Jingguo(137)
- Analysis of the half-side operation of a nuclear power steam turbine condenser CHEN Ziqiang, YANG Zhang(142)

RELI FADIAN



扫一扫关注我们

中国标准连续出版物号: ISSN 1002-3364
万方数据 CN 61-1111/TM

邮发代号: 国外 M3261
国内 52-103

定价: 16.00 元/期
192.00 元/年

ISSN 1002-3364



9 771002 336183