

全国中文核心期刊 · 中国科技核心期刊 · 全国中文核心期刊 · 中国科技核心期刊

THERMAL POWER GENERATION

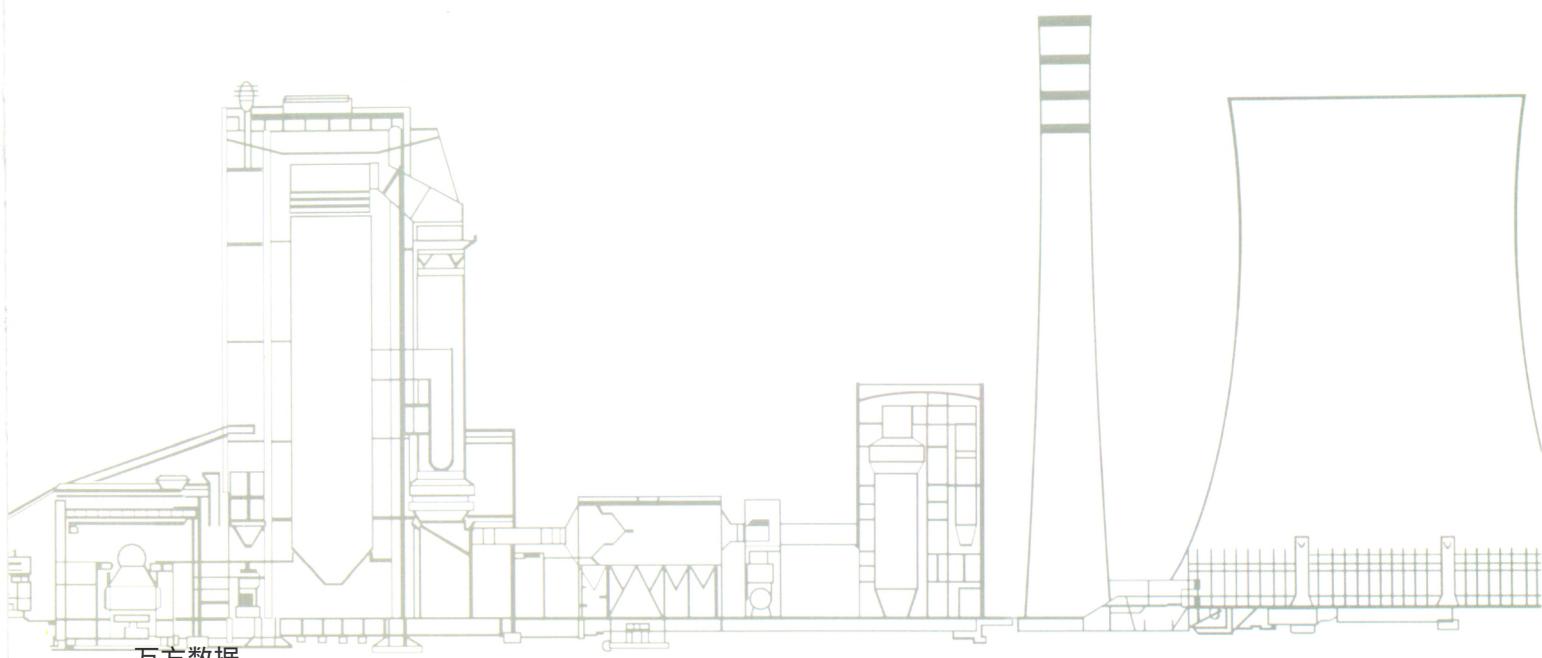
ISSN 1002-3364
CN 61-1111/TM
CODEN RFEAC8

热力发电

2014.6

总331期
1972年创刊
第43卷

■ 主办：西安热工研究院有限公司



万方数据

CONTENTS

目 次

技术经济综述

- 01 汽轮发电机组裂纹转子振动特性及其诊断 // 张学延, 丁联合
07 330 MW 热电联产机组调峰能力及经济性分析 // 朱 誉, 李千军, 冯永新, 吴淑梅, 廖艳芬, 马晓茜
11 地热能有机朗肯循环发电系统性能分析 // 郭 丛, 杜小泽, 杨立军, 杨勇平

热能科学研究

- 17 烟气汞浓度监测吸附管离线采样方法的拓展应用 // 钟 犀, 肖 平, 江建忠, 郭 涛, 郭 安
23 Extended application of carbon sorbent traps method in mercury concentration measurement in coal-fired power plants // ZHONG Li, XIAO Ping, JIANG Jianzhong, GUO Tao, GUO An
32 低浓度可燃废气处理系统热量回收特性研究 // 王一坤, 雷小苗, 曹 琦, 车得福
41 协同调节在机组变负荷运行中的应用 // 胡思科, 曹雪源, 王嘉琦
46 大差异煤掺烧反应动力学研究 // 陈鸿伟, 黄雪丽
51 烧结金属毡吸液芯平板热管传热特性试验研究 // 寇志海, 吕洪涛, 陈保东, 李广超, 刘 宇, 白敏丽, 杨洪武
55 磷酸酯抗燃油不同形态氯检测方法及其对油性能影响 // 明菊兰, 田刚强, 周飞梅, 沈晓明, 邱 苏, 潘芝瑛, 陈 陈
60 预热对煤中氮转化的影响研究 // 庄国霖, 汪华剑, 姚 晔
66 基于阶梯式控制的燃气-蒸汽联合循环机组监督预测控制算法 // 李素真, 刘向杰, 袁 钢
71 褐煤自燃特性热重实验及动力学分析 // 张 晔, 刘建忠, 赵卫东, 袁 绍, 王智化, 周俊虎, 岑可法
77 管壳式冷凝器温度分布计算 // 朱 辉, 许光第, 周麒彦, 朱冬生, 于腾祥, 安东旭
81 微富氧环境下煤粉/高炉煤气掺烧锅炉燃烧过程数值模拟 // 方立军, 武 生, 尹荣荣
86 煤粉热解电热网反应器研究 // 惠世恩, 王登辉, 张 庚
92 褐煤与石油焦的共成浆特性及机理 // 高夫燕, 刘建忠, 岑可法
98 W 火焰锅炉狭缝式燃烧器燃烧特性研究 // 吕 太, 王 奇
102 基于 GMDH 神经网络的超超临界机组过热蒸汽温度预测模型及仿真研究 // 陈小强, 许仙珍, 蔡璐璐, 张江丰, 楼可炜
108 基于改进分层有向图的故障诊断方法 // 杨 蕊, 谢 刚, 陈泽华
112 环境风对空冷风机群运行性能影响的数值模拟研究 // 王 星, 闫 宏, 孙大伟, 董康田

发电技术论坛

- 119 背压式汽动引风机控制的优化设计//崔 利,段远光,曹志刚,赵志丹,王海涛,于 刚
- 124 深圳能源集团生产实时数据管理系统//刘超飞,赖 菲,范 奇,董建国,廖 梅
- 127 燃气锅炉增容与低氮燃烧改造设计方案及其应用//陈伟霖
- 132 火电厂烟风系统空气预热器漏风治理与节能应用//金生祥,何奇善,李前宇,韦红旗
- 136 微波法测量煤质水分频率的选取//刘海玉,谭厚章,樊保国,金 燕

现场经验交流

- 141 褐煤锅炉 SCR 入口烟温高和制粉干燥出力不足问题分析及改造//李红智,姚明宇,徐党旗,聂建平
- 145 汽轮机首级静叶面积对机组性能的影响与改造//苗承刚
- 149 一次风机试验及节能改造//郑 金,李文盛,朱 宁,孙大伟,董康田,魏勇平
- 153 背压式汽动引风机运行及排汽回收利用//雷兆团,付龙龙,党小建,朱朝阳,韩 磊,张少勇

[期刊基本参数]CN61-1111/TM*1972*b*A4*84*zh*P*¥16.00*4500*30*2014-6

THERMAL POWER GENERATION

CONTENTS

Vibration characteristics of cracked rotor and crack diagnosis for turbine generator set	ZHANG Xueyan, DING Lianhe(1)
Peaking capability and economic analysis for a 330 MW cogeneration unit	ZHU Yu, LI Qianjun, FENG Yongxin, WU Shumei, LIAO Yanfen, MA Xiaoqian(7)
Performance analysis of organic Rankine cycle for power recovery from geothermal energy	GUO Cong, DU Xiaoze, YANG Lijun, YANG Yongping(11)
Extended application of carbon sorbent traps method in mercury concentration measurement in coal-fired power plants	ZHONG Li, XIAO Ping, JIANG Jianzhong, GUO Tao, GUO An(17)
Heat recovery characteristics of low concentration combustible waste gas processing system	WANG Yikun, LEI Xiaomiao, CAO Qi, CHE Defu(32)
Application of cooperative regulation in variable load operation of power units	HU Sike, CAO Xueyuan, WANG Jiaqi(41)
Kinetics study on co-combustion of coals with great difference	CHEN Hongwei, HUANG Xueli(46)
Experimental investigation on thermal performance of a flat heat pipe	KOU Zihai, LU Hongtao, CHEN Baodong, LI Guangchao, LIU Yu, BAI Minli, YANG Hongwu(51)
Discrimination of different forms of chlorides in phosphate ester fire-resistant fluids and their influences on fluid performance	MING Julian, TIAN Gangqiang, ZHOU Fei mei, SHEN Xiaoming, QIU Su, Pan Zhiying, Chen Chen(55)
Effect of preheating on nitrogen transforming in coal	ZHUANG Guolin, WANG Huajian, YAO Bin(60)
Stepped control based supervisory predictive control algorithm for gas-steam combined cycle generating units	LI Suzhen, LIU Xiangjie, YUAN Gang(66)
Thermogravimetric experiments and dynamic analysis on spontaneous combustion characteristics of lignite	ZHANG Bin, LIU Jianzhong, ZHAO Weidong, YUAN Shao, WANG Zhihua, ZHOU Junhu, CEN Kefa(71)
Temperature distribution calculation for a shell-and-tube condenser	ZHU Hui, XU Guangdi, ZHOU Guoyan, ZHU Dongsheng, YU Tengxiang, AN Dongxu(77)
Numerical simulation on combustion process of a pulverized coal/blast furnace gas combined combustion boiler in micro-oxygen-enriched atmosphere	FANG Lijun, WU Sheng(81)
Investigation and improvement of electrically heated grid reactor for coal pyrolysis	HUI Shi'en, WANG Denghui, ZHANG Geng(86)
Characteristics and mechanism of co-slurry of lignite and petroleum coke	GAO Fuyan, LIU Jianzhong, CEN Kefa(92)
Numerical study on combustion characteristics of slit type burner in W-flame boilers	LU Tai, WANG Qi(98)
GMDH neural network based predictive modeling and simulation for superheated steam temperature of 1 000 MW ultra-supercritical units	CHEN Xiaoqiang, XU Xianzhen, CAI Lulu, ZHANG Jiangfeng, LOU Kewei(102)
A fault diagnosis method based on improved hierarchical directed graph	YANG Rui, XIE Gang, CHEN Zehua(108)
Effect of environmental air on operation performance of the air cooling fan cluster; numerical study	WANG Xing, YAN Hong, SUN Dawei, DONG Kangtian(112)
Design optimization for control strategy of a backpressure steam-driven induced draft fan	CUI Li, DUAN Yuanguang, CAO Zhigang, ZHAO Zhidan, WANG Haitao, YU Gang(119)
Real-time data management system in Shenzhen Energy Group	LIU Chaofei, LAI Fei, FAN Qi, DONG Jianguo, LIAO Mei(124)
Design scheme and engineering application of capacity upgrading and low NO _x combustion retrofitting for gas boilers	CHEN Weilin(127)
Air leakage control and energy-saving application of air preheater in thermal power plants	JIN Shengxiang, He Qishan, LI Qianyu, WEI Hongqi(132)
Selection of emission frequency form moisture measurement in coal by microwave power attenuation	LIU Haiyu, TAN Houzhang, FAN Baoguo, JIN Yan(136)
Overhigh flue gas temperature at SCR inlet and insufficient drying capacity of pulverizing system in lignite boilers: reason analysis and countermeasures	LI Hongzhi, YAO Mingyu, XU Dangqi, NIE Jianping(141)
Effect of the first stage static blade area on turbine performance	MIAO Chenggang(145)
Experiment and energy saving retrofitting schemes for primary air fans	ZHENG Jin, LI Wensheng, ZHU Ning, SUN Dawei, DONG Kangtian, WEI Yongping(149)
Back pressure turbine driven induced draft fans: operation and exhaust recycle	LEI Zhaotuan, FU Longlong, DANG Xiaojian, ZHU Chaoyang, HAN Lei, ZHANG Shaoyong(153)

RE LI FA DIAN

ISSN 1002-3364



9 771002 336145

ISSN1002-3364
万方数据

CN61-1111/ TM

邮发代号：52-103

国内定价：16.00元