



**全国产安全智能型DCS在燃机中的应用前景分析**

作者 : 张州平  
分类 : 论文  
价格 : ¥0.00

[↓ 下载 \(user/download/f818962d2ff23acde054d89d67f5a4e2.pdf?flag=0\)](user/download/f818962d2ff23acde054d89d67f5a4e2.pdf?flag=0)

### 详细信息

【标题】全国产安全智能型DCS在燃机中的应用前景分析

【Title】Application prospect analysis of National Production, Safe and Intelligent DCS in Gas Turbine

【摘要】随着电子化和信息化的发展以及国际环境的变化，自主可控的工业控制系统对国民经济高效安全的发展越发的重。加快提高国产DCS系统质量，推动国产DCS和热工自动化设备的应用进程势在必行。重型燃气轮机在电力行业应用广泛，当前其核心技术尤其是核心控制技术被GE、三菱、西门子等大型公司垄断，加强燃气轮机核心技术国产化是当前国内该领域主要研究方向，实现燃机控制系统国产化对于该领域的自主可控具有重要意义。基于华能睿渥系统，研发团队成功开发出基于国产替代的智能安全型全厂主辅一体化DCS。将从睿渥DCS国产化、智能化和工控网络安全出发，对睿渥DCS的体系架构进行梳理；从具有代表性的协调智能预测控制和变结构预测控制算法模块出发详细介绍睿渥DCS智能控制技术的应用；并分析全国产安全智能型DCS在燃机控制系统中的应用前景。

【Abstract】 With the development of electronic and information technology and the change of international environment, autonomous and controllable industrial control system is becoming more and more important for the efficient and safe development of national economy. It is imperative to accelerate the improvement of the quality of domestic DCS system and promote the application process of domestic DCS and thermal automation equipment. Heavy-duty gas turbine is widely used in electric power industry. At present, its core technology, especially the core control technology is monopolized by GE, Mitsubishi, Siemens and other large companies. Strengthening the localization of gas turbine core technology is the main research direction in this field. Localization of gas turbine control system is of great significance for autonomous control in this field. Based on HNICS-T316 system, the R&D team has successfully developed intelligent and safe DCS based on domestic substitution. This paper combed the system architecture of HNICS-T316 from the localization, intelligence and industrial control network security. Furthermore, the application of intelligent control technology of HNICS-T316 was introduced from the representative coordinated intelligent predictive control and variable structure predictive control algorithm module. Lastly, the application prospect of national production safety intelligent DCS in gas turbine control system is analyzed.

【关键词】全国产；安全智能型；DCS；燃机控制系统

【Keywords】 National Production; Security Intelligence; DCS; Turbine Control System

【作者】

张州平：华能苏州热电有限责任公司

【来源】2022年中国电机工程学会年会论文集

### 所属合集

>2022年中国电机工程学会年会 (detail/F81A88732DD94181E055000000000001) >2022年中国电机工程学会年会论文集 (detail/F7EB95060CACB5D3E055000000000001)

### 访问信息

【浏览数： 7】 【收藏数： 0】 【购买数： 0】 【下载数： 0】

