

Application analysis of computer control system in electronic engineering

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Abstract

The invention and application of computer is one of the important reasons for the rapid development of modern society. Nowadays, computer has penetrated into every aspect of people's life, completely changed people's way of life, and become an indispensable part of people's normal life. Not only that, the computer in people's work and production for generation also play an role, especially for electrical engineering and its automation, computer and computer technology is the key and foundation, the computer control system in electrical engineering and its automation is very important in the position, the effect of its application directly determines the development of the industry, Based on this, this paper will analyze and study the computer control system of electrical engineering and its automation.

Keywords

Computer, electrical engineering, automation.

1. Introduction

Electrical engineering and its automation are the concrete manifestation of scientific and technological achievements and the comprehensive application of various modern high-tech science and technology. Its appearance has changed the traditional mode of industrial production and greatly improved the production efficiency of industrial production. It has made great contributions to the development and progress of my country's industry. At the same time, with the continuous development of electrical engineering and automation, its application scope has become wider and wider. Today, not only industrial production is inseparable from electrical engineering and its automation, but people's daily life is also inseparable from electrical engineering and its automation. Its automation, and the computer control system makes it the key and core, so the analysis and research of electrical engineering and its automation computer control system is of great significance to promote social development.

2. The function and significance of electrical engineering in computer control system

Computer control system is essentially a logical thinking mode, which is a great invention made by modern science to simulate human brain. Computer control system is a complex system, is the comprehensive application of a variety of science and technology, involving a variety of scientific fields. For example, information science, language science, biological science, control science and so on in the computer control system will be used. Computer control system has a very important application in the mechanical operation, the use of computer control system can simulate the human brain to the mechanical equipment to issue commands, so that it runs in accordance with people's wishes, so that the operation ability and control ability of mechanical

equipment is greatly improved, and then improve the operation efficiency of mechanical equipment. The current society is in a stage of rapid development, for the growing demand for industrial products, in order to meet the needs of social development, reform and innovation, positive for construction work has become the key areas of industrial automation, and computer control system is the core of the construction of the industrial automation, so want to do a good job of reform and innovation of industry, Effective application of computer control systems must be achieved. For industrial development, electrical engineering and its automation is indispensable, it is the most important pillars of industrial development, in a variety of technologies have played a very important role, such as computer technology, remote sensing technology, modern information technology and so on are all through the effective use of the electrical engineering and its automation, at the same time it is also the application of these advanced technologies, Electrical engineering and automation can be developed, will progress. The biggest characteristic of computational control system is efficient, human nature, science and technology and environmental protection, and this is the main theoretical basis of computer control system, its performance in practice lies in the application of all kinds of intelligent robots. Electrical engineering and its automation of the computer control system can be used to replace human to accomplish those for human dangerous, difficult work and tasks, and then work to reduce casualties, the purpose of reduce the economic loss, so the electrical engineering and its automation of the computer control system for people working life, to ensure the personal safety is of great significance.

3. Application status of electrical engineering and computer control system

At present, the electrical engineering and automation of the computer control system the application scope of ten points is widespread, involves various industries of our society, as well as all aspects of People's Daily life, to say the electrical automation level of high and low has to a certain degree of Shanghai rang people's quality of life, and for the most part affects the economic construction of our country into the routine, It is believed that with the passage of time, the level of electrical automation will become an important standard of national economic level and people's quality of life. Nowadays, the influence of electrical engineering and its automatic computer control system is expanding day by day, and people's dependence on it is gradually increasing, which also accelerates the development speed of electrical engineering and its automatic computer control system, and promotes the development and utilization of related new technologies. In the long-term application and use of process, people in electrical engineering and its automation of the computer control system to the deeper and more understand, understanding is becoming more and more comprehensive, combined with the traditional electrical control mode has not enough to meet the requirements of production in large quantities, so people demand for computer control system has become more and more urgent, demand more and more is also high.

Through the application of electrical engineering and its automatic computer control system, the production efficiency of industrial production can be greatly improved, the production mode of traditional industry can be changed, and the industrial reform and innovation can be realized. Especially in today's king of science and technology, science and technology in continuous progress, computer control system is constantly optimized, its performance is constantly improving, so the application depth and wide application of electrical engineering and its automation computer control system are increasing, play a more and more important role.

4. Practical application of computer control system in electrical engineering

4.1. For electrical fault diagnosis

In actual industrial production process, often need to maintain electrical equipment in the running state for a long time, long working hours make electrical equipment during operation inevitable there will be a failure of one sort or another, will affect the normal work of electric equipment, undermine the normal production of industrial production enterprises, for the enterprise to bring the serious economic loss. Although most of the electrical equipment failures will show some abnormal signs to remind people before the occurrence, but it is difficult to find these abnormal states comprehensively and timely only by relying on human detection, and then miss the best period to prevent the occurrence of faults. And the electrical engineering and its automatic computer control system instead of manual operation of electrical equipment detection, it can be timely found in the operation of electrical equipment abnormal display, effectively prevent the occurrence of failure, greatly reduce the incidence of electrical equipment failure. In addition, even for the equipment that has failed, the system can accurately and quickly find the cause of the failure, and quickly give a reasonable solution, so as to minimize the economic loss of the enterprise.

4.2. For electrical fault diagnosis

The traditional operation and control mode of electrical equipment is mainly controlled and operated by manpower on site, which not only wastes a lot of manpower and material resources, but also increases the operating cost of the enterprise. It is not efficient and has great uncertainty. The development of society and the progress of the times have told people that the traditional equipment operation control mode can no longer meet the needs of modern industrial production and will be eliminated. The computer control system using electrical engineering and its automation can realize remote and collective control of electrical equipment, and the accuracy of the control is far greater than that of traditional manual control, thereby reducing the cost of human resources and improving industrial production. Production efficiency, expand the economic benefits of enterprises.

5. Conclusion

To sum up, with the advancing of the society, people demand for industrial products is constantly rising, in order to meet the needs of people, building and intelligent building automation industry have become the industry's first priority, and people living in demand for automatic system and intelligent system continues to rise. Based on these factors, the research and analysis of electrical engineering and its automated computer control system has become the key to industrial development and social progress, so the relevant staff must increase the intensity of this research, so that it can play a greater role and value, and promote the continuous prosperity and strength of our country.

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