

AUTOMATED ELECTRIC DRIVES

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Automated electric drive specialization is a field of study that focuses on the development, design, and implementation of automated electric drive systems. It involves the use of advanced technologies such as sensors, controllers, and actuators to automate and control electric drive systems. This specialization is important in industries such as automotive, aerospace, and manufacturing, where the use of automated electric drive systems has become increasingly popular.

What are the trends that deserve the most attention these days? Firstly, the rapid development of technology. Secondly, the rising cost of energy. Specialists say that this has a direct bearing on the automated electric drive (a.e.d.). The main point is that it should be made so that it saves energy.

A.e.d. are special structures, which have in their set gears, electric motors and controlling equipment, which gives efficiency of movement and control by main systems in working machines. It has such advantages as: 1. it improves the purchasing power, 2. if needed, the drive can be networked with the data collection server with the advantage of remote access, 3. It controls the speed, acceleration power and sets the suitable modes for many mechanics.

The a.e.d. does not need to be monitored by the operator, because it operates completely in automatic mode. Whereas with a non-automated actuator, all the adjustments of the device will be done manually. So you need a person who will watch the work - the operator. A.e.d. systems can be used in a variety of applications, from industrial processes to home appliances. They have

made our lives easier and more efficient by reducing the need for manual labor and increasing precision.

One of the main benefits of a.e.d. is that they can be used in manufacturing processes to streamline production lines and reduce downtime. This means that products can be produced faster and with greater accuracy, which ultimately leads to cost savings for companies. Additionally, a.e.d. can be used in transportation systems, such as trains or buses, to improve efficiency and reduce emissions.

Another advantage of a.e.d. is their ability to improve safety. By reducing the need for human intervention, these systems minimize the risk of accidents caused by operator error. They also allow for remote monitoring and control, which means that operators can monitor and adjust systems from a safe distance. This is particularly important in hazardous environments, such as chemical plants or oil refineries.

A.e.d. can also be used in household appliances to make everyday tasks easier. For instance, vacuum cleaners can be equipped with a.e.d. to adjust suction power depending on the surface being cleaned.

Despite the many advantages of a.e.d., there are some concerns about their impact on employment. As these systems become more prevalent, there may be a decrease in the number of jobs available for manual laborers. However, it is important to remember that a.e.d. require skilled technicians to design, install, and maintain them. This means that there will still be job opportunities in this field.

In conclusion, automated electric drive are a valuable technological advancement that can be used in a wide range of applications. They offer numerous benefits, including increased productivity, improved safety, and greater efficiency.