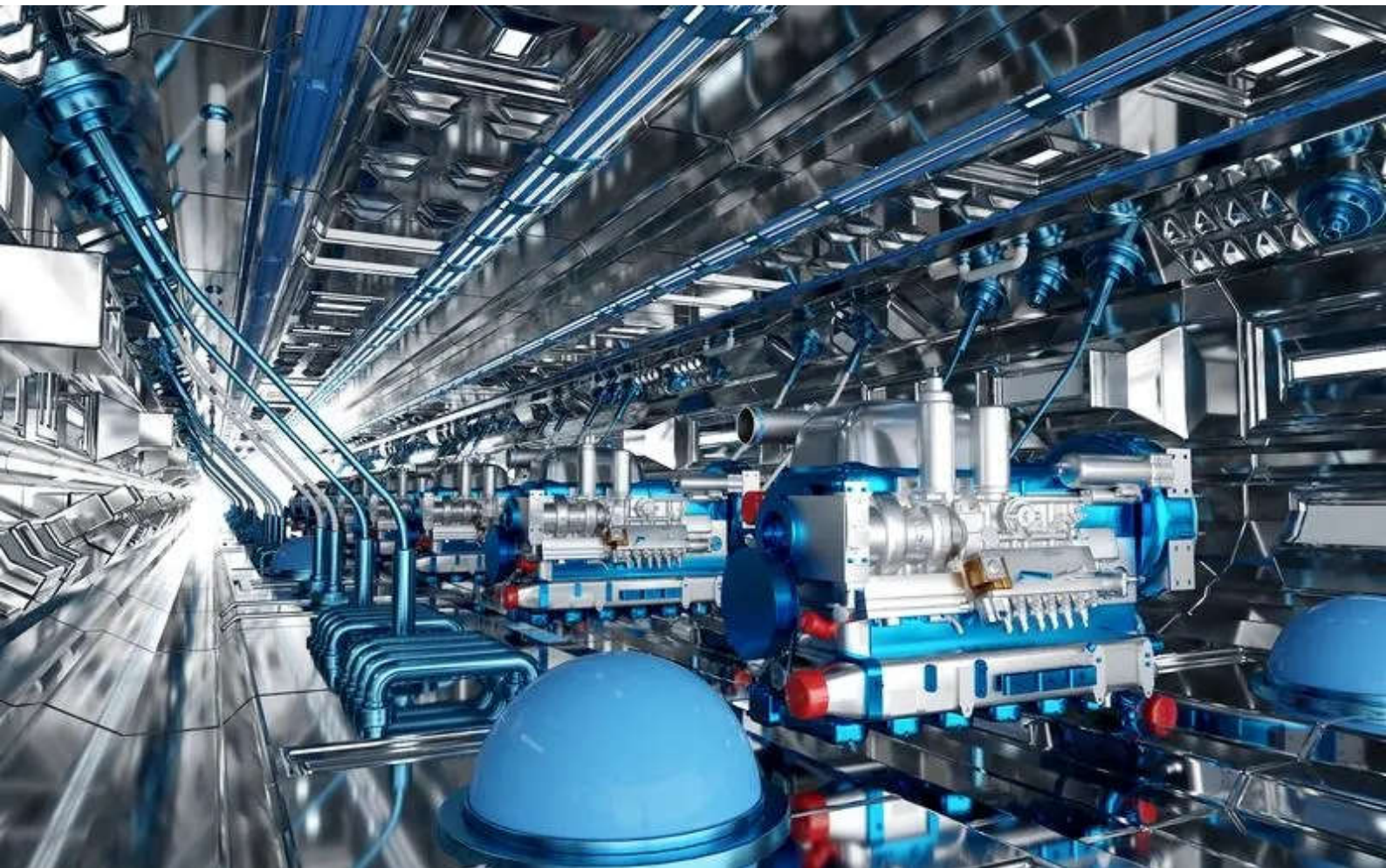


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**Automation  
Industry 4.0**



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## Static Synchronous Compensator (STATCOM)



Standard Power Automation refers to the process of achieving expected goals through automatic detection, information processing, analysis, judgment, and manipulation control of machine equipment, systems, or processes (production, management processes) without or with a small number of people directly participating, according to human requirements.

Automation technology is widely used in industry, agriculture, military, scientific research, transportation, commerce, medical care, service and family. Adopting automation technology can not only liberate people from heavy physical labor, partial mental labor, and harsh and dangerous working environments, but also expand human organ functions and greatly improve labor productivity,



The broad connotation of our automation includes at least the following points: in terms of form, manufacturing automation has three meanings:

replacing human physical labor,

replacing or assisting human mental labor,

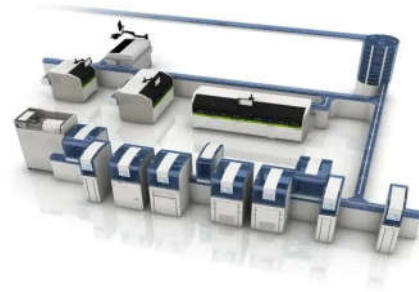
and coordinating, managing, controlling,

and optimizing human-machine and the entire system in manufacturing systems.

In terms of functionality, automation replacing human physical or mental labor is only a part of the automation functional objective system. The functional goals of automation are multifaceted and have formed an organic system.

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## Our offer



Process automation: The automation of chemical treatment of fluids or powders in industries such as petroleum refining and chemical engineering. Generally, a process control system composed of detection instruments, regulators, and computers is used to achieve optimal control of equipment such as heating furnaces, distillation towers, or the entire factory. The main control methods used include feedback control, feedforward control, and optimal control.

Mechanical manufacturing automation: This is the result of the combination of mechanization, electrification, and automatic control, which processes discrete workpieces. Early mechanical manufacturing automation used single machine automation or simple automated production lines for mechanical or electrical components. After the 1960s, due to the application of electronic computers, CNC machine tools, machining centers, robots, computer-aided design, computer-aided manufacturing, automated warehouses, etc. emerged. Develop a flexible manufacturing system (FMS) that adapts to multiple varieties and small batch production forms. Automated workshops based on flexible manufacturing systems, coupled with information management and production management automation, have emerged with factory automation using computer integrated manufacturing systems (CIMS).

Management automation: The automation of human, financial, material, production, office and other business management in factories or public institutions is a comprehensive technology centered on information processing, involving disciplines such as electronic computers, communication systems, and control. Generally, a local network composed of multiple computers and various terminals with the ability to process a large amount of information at high speed is used. Modern times have developed a Decision Support System (DSS) based on management information systems, providing alternative solutions for senior management decision-making.