

Solar Storage Container Solutions

Power station uses generator to generate electricity



Overview

Many power stations contain one or more generators, a rotating machine that converts mechanical power into three-phase electric power (these are also known as an alternator). How does a power station turn a generator?

Power Stations Turning a generator produces electricity. To turn the generators we connect them to turbines. We use different energy resources to turn the turbines. Wind and water flow can turn turbines directly. Steam is often used, produced by heating water. The heating is done by burning fuels, or using other heat sources.

How do electricity generators work?

Most U.S. and world electricity generation is from electric power plants that use a turbine to drive electricity generators. In a turbine generator, a moving fluid—water, steam, combustion gases, or air—pushes a series of blades mounted on a rotor shaft. The force of the fluid on the blades spins (rotates) the rotor shaft of a generator.

Which type of generator does a power plant use?

And to generate power, a power plant required the help of generators. In most cases, there are one or more generators added to a power station. And whenever you ask which type of generator does a power plant use, the easy answer is an electric generator. These generators can easily work on the mechanical energy and use it as an input.

How is electricity generated in large power stations?

Electricity can be generated in large power stations from: Fossil fuels (coal, natural gas and oil) which were formed hundreds of million years ago and will eventually run out. All the fossil fuels produce carbon dioxide when burned. The extra carbon dioxide from burning fossil fuels is a cause of global warming which causes climate change.

How does a power station work?

Many power stations contain one or more generators, a rotating machine that converts mechanical power into three-phase electric power (these are also known as an alternator). The relative motion between a magnetic field and an electrical conductor creates an electric current.

Why is a power generating station important?

Power plants are usually located in suburban areas or far from cities due to their need for large amounts of land and water, as well as requirements for waste disposal. For this reason, a power generating station has to not only concern itself with the efficient generation of power, but also in the transmission of this power.

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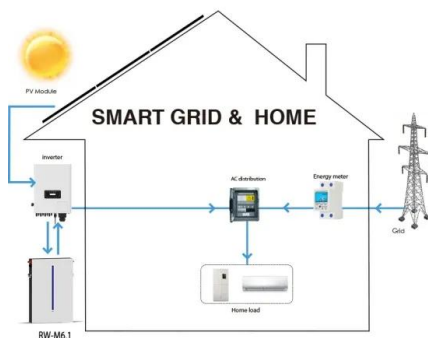


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