Electric generators



Task 1. Work at pronunciation:

To convert	Преобразовать
To rotate	Вращаться
Winding	Обмотка
To generate	Вырабатывать
Nearly	Почти
To obtain from	Получить от
Customer	Потребитель
Power line	Линия электропередач

Task 2. Pronounce the words.

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Task 3. Read the text. Fill in the gaps. Use the hints below.

Electric _____is a machine that converts mechanical energy to electricity for transmission and distribution over power lines to domestic, commercial and industrial customers. The mechanical power for an electric generator is obtained from a_____. The mechanical power may come from hydraulic turbines, wind turbines, gas turbines, steam turbines, gasoline and diesel engines. Nearly all generators used to supply electric power networks generate alternating current. Electric generators work on the principle of electromagnetic induction.

Synchronous alternator consists of a stationary _____ with the output windings arranged around its periphery and a rotating, driven rotor with direct current windings acting as an electromagnet. When the electromagnet rotates, it generates a current in the stator. In_____, it generates up to 24,000 V of current. The power that is generated is alternating current, which is transformed to the voltage required.

Electric generators are useful for homes, shops, offices, etc. which face frequent power outages. They act as a backup to ensure that the appliances receive uninterrupted power supply. In distant areas, where electricity from the main line cannot be accessed, electric generators act as the primary source of power supply

rotating shaft

Generator

Operation

stator

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