

Annotation

This thesis deals with the design of an energy technology complex based on the Orbita boiler house in Almaty.

During the work, calculations were made and the choice of basic devices, such as a gas turbine, a combustion boiler, and a compressor. The main goal of the project is to save electricity, improve the reliability of the boiler's power supply, separate it from external electricity purchases and achieve partial or partial electricity savings. To do this, it is recommended to put a Siemens gas turbine model SGT-300 in front of the boiler.

In the economic part before and after the design, the cost and economic efficiency of the project are determined. In the section "life Safety", the calculation of fan motor zero and fire safety is provided.