

Annotation

In this graduation project it is proposed to calculate the combined-cycle gas turbine and the units that operate on synthesis gas.

In the heat engineering section, the calculation of the 550 MW CCGT thermal scheme with a 2-circuit waste heat boiler and 3-circuit waste heat boiler, as well as the calculation of the gasification reactor, is presented.

In the life safety section, calculations of the artificial lighting of the turbine shop and the fire hazard characteristics in the IES, possible causes of the fire are presented.