

Annotation

This diploma project considers the issue of upgrading the Almaty Power Plant-1 by replacing the brass pipes of the low-pressure heater with stainless steel pipes.

In a special question, the thermal calculation of HDPE was made and practical measures for the implementation of this project were proposed.

The paper also calculates the basic thermal scheme of the station. The analysis of working conditions of employees of the enterprise, calculation of ventilation and acoustic calculation of the turbine shop is performed. In the Economics section, the cost of electricity and heat output of Power Plant-1 was calculated before and after the station's modernization. The efficiency and expediency of investment in this project are calculated.