

Abstract

This graduation project was drawn up for the Novo-Zapadnoy district boiler plant. The project establishes a two-stage fuel combustion on the KVGM-100-150 unit to reduce emissions of nitrogen oxides and install gas-impulse cleaning of the boiler.

The project calculates the thermal systems of the boiler KVGM-100-150, and compares the emission of nitrogen oxides before and after the application of a two-stage combustion of fuel.

In the economic section, calculations were made that showed that at a lower discount rate, the net present value and profitability index increase, and the payback period decreases.

In the section "Safety of life", an analysis was made of the working conditions of employees on the thermal control board (TSHU).