

Summary

Coursework

discipline "Heat engineering and thermal power"

Student groups FS-31

Bubliienko Iryna

On " Tumble dry sand in the boiling layer "

In the course work was designed dryer in boiling dry sand layer. Course work contained 19 pages of printed text, and other drawings A1.

Explanatory note consists of an introduction, four chapters and a list of references includes five figures and one table. In the introduction disclosed the essence of the dryer to dry sand in the boiling layer.

The first section composed material balance dryers where moisture is calculated that evaporates a lot of wet and dry sand. Defined as calorific value of the fuel which itself refers to the calculation of higher and lower heat of combustion. Further such items as calculated dry amount of air required for drying grain, air flow rate, fuel consumption, heat content of products of combustion and heating costs are calculated.

The second section shows the details of construction and the chart-d and calculated for its construction also shows the scheme dryers.

The third section provides data and calculations-d diagrams such as the cost of dry gas, fuel composition and quantity of waste products.

The fourth section shows the calculations of the lattice gas distribution and size of the drying chamber. As a result, the grid was chosen the round form with $d = 1,7$ m and height of the working chamber $h = 0,4$ m lattice section with live bezprovalna 3.5% of the total area. Also in this section been selected burner for natural gas low pressure HNP - 5 of a multi-nozzle type A, which shows a general view.