

**Summary**  
**Coursework**  
**discipline "Heat foundry"**  
**Student groups FL-32**  
**Savoschenko Gleb**  
**On "Resistance electric shaft vertical"**

In the course work was estimated the electric resistance of the vertical shaft. Course work contained 36 pages of printed text, and other drawings A1.

Explanatory note consists of an introduction, nine chapters, contains a list of references and one figure.

The first section of the explanatory note duration is determined by heating dvohstupinchatoho castings in vertical shaft electric resistance. The duration of the heating during slow heating furnace at constant heat flow and temperatures during alignment at a constant temperature surface. Then determine the total time of heating.

The second section provides calculation of the size of the working space of the furnace

The third section provides a choice for lining walls and hearth. To apply the hearth fireclay brick product SHA-1 and №5 SHLB-0.9 product №7. For the walls (as refractory) bricks SHA-1 wedge rib and №45 (as insulation) SHLB 1.0 klynorebrova-sided wedge End product number 22.

The fourth section were calculated exterior dimensions of the furnace.

The fifth section was defined index oven SSHO-12.36 / 10

In the sixth section was designed furnace frame

In the seventh section calculated heat balance of the furnace. There was a certain coming of heat (13,105.6 kJ). Also all costs by heat. Total costs of heat in the oven = 3011523,6 kDzh.

In the eighth section was estimated electric power oven  $P = 236 \text{ kVt}$

In the ninth chapter we expected heaters. Determined distribution capacity regulation zones and calculated the size heaters

**Keywords:** RESISTANCE ELECTRIC SHAFT VERTICAL, HEATERS,  
TWO-STAGE HEATING, INSULATION, FIREPROOF