

Summary  
course work  
discipline "Thermotechnics and power system"  
student of FS-31 Iryna Kutsyk  
on "Electric arc furnace"

Coursework consists of explanatory note and graphical documents. The amount of explanatory notes is 40 pages of printed text (A4).

The volume graphic documentation of the course work is one letter (A1).

In this course work was designed electric arc furnace capacity of 1.5 tons for alloy steel smelting.

The first section describes the hardware specifications.

The second section is designed to charge smelting alloy steel grade.

The third section is intended geometric dimensions of workspace DSP.

The fourth section is given calculation of the size of the vapor system.

In the fifth section describes the hearth refractory, walls and workspace.

In the sixth section describes the power transformer.

In the seventh chapter calculated the heat balance of the furnace.

In the eighth chapter selected degree power transformer for periods of melting.

In the ninth chapter defines secondary voltage and current.

In the tenth chapter defines rational mode of the furnace.

Keywords: electric arc furnace, transformer, electrodes, refractory.