

ABSTRACT

Graduate work: 91 pages, 26 figures, 27 tables

Thesis: Development of Technology for Manufacturing the "Bearing Housing" Casting from Gray Iron FC150 and Planning the Melting Department of the Foundry Shop

Objective: To develop a technology for manufacturing the "Bearing Housing" casting from gray iron FC150 and to plan the melting department of the foundry shop.

Methodology: Development of technology for manufacturing the casting in sand molds made of gray iron;

Calculation of the main parameters and design of an induction melting furnace; Design of the drawing of the "Bearing Housing" casting; Design of the drawing of the "Top and Bottom Mold Plate with Models"; Design of the drawing of the "Core Box"; Design of the drawing of the "Mold in Assembled Form".

Results: A technology for manufacturing the casting in a sand mold made of gray iron was developed; The following graphic objects were designed: "Bearing Housing", "Top and Bottom Mold Plate with Models", "Core Box", "Mold in Assembled Form"; The technical and economic indicator was calculated; Occupational safety measures were developed in accordance with the plan of the melting department and the technology for manufacturing the casting.

GRAY IRON FC150, FC200, PG SAND MIXING LINE B715, INDUCTION
CRUCIBLE FURNACE, MELTING DEPARTMENT