

ABSTRACT

Title: Development of the Manufacturing Technology for the “Clamping Ring” Steel Casting (35L) and Planning of the Finishing Operations Department of the Foundry

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The object of this diploma project is a steel casting titled “Clamping Ring” with a mass of 0.28 kg. It is produced by casting into disposable sand–clay molds. The project also involves the design of the finishing operations department of a foundry.

The developed technological process is suitable for use as a standard method in the production of medium-complexity steel castings weighing up to 100 kg under conditions of batch manufacturing.

Preliminary calculations of the economic efficiency of the proposed technical solutions confirm their feasibility.

The project also includes an analysis of potentially hazardous and harmful production factors specific to the finishing operations department, as well as the development of measures to ensure safe working conditions for personnel.

Keywords: CASTING, CLAMPING RING, STEEL, SAND–CLAY MOLD, FLASK, FINISHING OPERATIONS DEPARTMENT, TUMBLING DRUM