Zayets Danylo

Development of a technological process for the production of a casting of the Buffer Striker and organization of the finishing operations department of the foundry

The diploma project consists of: 93 pages; 7 figures; 35 tables; 12 references.

The project designs the finishing operations department, which is part of a foundry with a capacity of 5000 tons of suitable castings per year from such metals as alloys of grades CЧ350, 35L and 40XЛ. A technological process is being developed for the production of a 40KhL steel (DSTU 8781-2018) "Buffer striker" casting weighing 0.27 kg using lost foam casting.

The technology for casting the Buffer Striker for investment casting was developed. Technical planning of the finishing operations department and casting equipment was also carried out.

When designing the department, we analyzed the equipment requirements, calculated organizational and economic factors.

This included the calculation of salaries for main and auxiliary employees, depreciation costs for equipment and energy resources used to speed up the production process.

Taking into account the regulatory documents, all necessary measures were taken to ensure the safety of employees and preserve the environmental friendliness of the environment. For this purpose, safety devices were installed near the equipment and exhaust hoods were installed in the building structure and directly in the finishing operations department.

FINISHING OPERATIONS DEPARTMENT, SHOT BLASTING DRUM, COMPARATIVE TECHNICAL AND ECONOMIC INDICATORS, MOLD, ASSEMBLED MOLD