Development of the technology for manufacturing the casting "Vacuum filter valve body" from gray cast iron C420 and planning of the chopping and cleaning department of the foundry.

Yermolenko Oleksii

Foundry production is a branch of metallurgy industry, which specializes in the production of castings from various materials and alloys. This is achieved by pouring molten materials into a custom-made mold that matches the casting configuration. The demand for products manufactured in foundry is growing every year, therefore the need for maximum improvement foundries due to the automation and mechanization of processes as well increases.

The simplest and easiest way to make castings is casting sand and clay forms. This method has several advantages, such as simplification training of workers in production, reduction of costs of casting and costs products, the possibility of recycling production waste. It provides sustainability of this casting method, and also inspires scientists in the field for modernization and improvement of processes.

The purpose of this diploma project is to develop a technology for the production of cast iron castings and the design of a cutting and cleaning station.

BODY, TILTING DRUM, FOLDED MOLD, MODEL PLATE, CORE BOX, CHOPPING AND CLEANING COMPARTMENT