## Yakymchuk Andrii Olehovych

"Foundry complex of the machine-building plant with the development of technologies for the production of castings in various ways"

## ABSTRACT

Master's thesis: 123 pages, 43 tables, 4 figures, 18 literary references,

3 appendices, 9 drawings.

The object of the master's thesis: designing a foundry complex of cast iron and aluminum production with a capacity of 1500 tons of suitable castings per year; development of technology for the manufacture of castings from cast iron and aluminum alloy; technological planning and organization of production.

Subject of the master's thesis: technology of casting mold, planning and organization of the foundry complex; development of and efficient production cycle; design of a die-casting machine.

Results of the master's thesis: the technology of the casting mold was developed; technical planning of the foundry complex was carried out; injection molding machine was designed. The results of the design can be recommended for implementation in the production of small (up to 150 kg) castings of medium complexity in serial or mass production.

In the master's thesis also carried out the basic calculations of organizational and economic factors and provided recommendations for the protection of the personnel of the complex from harmful factors and improvement of sanitary and hygienic conditions in the workplace.

## FOUNDRY COMPLEX, CAST IRON, ALUMINUM, DIE CASTING MACHINE, PRESS FORM, MODEL PLATE, BODY.