

SUMMARY

Master's thesis consists of: 124 pages, 3 images; 45 tables; 15 links.

The project of the foundry complex of the artistic casting enterprise with casting production technologies with a capacity of 10,000 tons of usable castings per year, which specializes in the production of small artistic cast iron and bronze castings, was developed in the dissertation work. Technological processes of production of typical representatives from the nomenclature of the foundry complex using the technology of casting in sand-clay molds and a special casting method have also been developed.

As a result of the completion of the master's thesis, the production program of the enterprise was analyzed, the calculations of the main technological departments of the foundry complex of the enterprise were carried out, the type and quantity of technological equipment was determined, the planning of the complex was developed. The technology of casting in single-volume sand-clay molds from cast iron alloy and the technology of casting from bronze alloy based on melting models have been developed. The main parameters were calculated and the equipment of the mixing department for the preparation of the molding mixture was designed. Calculations of technical and economic performance indicators of the foundry complex were carried out and a start-up project was developed.

FOUNDRY COMPLEX, ARTISTIC CAST, IRON CAST, CASTING IN SAND-CLAY MOLDS, CASTING FOR MELTING MODELS, IRON ALLOY