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Planning of the foundry complex of the armored plant with technologies for the  
manufacture of steel castings

SUMMARY

Master's thesis consists of: 149 pages, 8 images; 51 tables; 18 links.

In the master's thesis the project of the foundry complex of the armored plant with a capacity of 5,000 tons of suitable castings per year was developed, which specializes in the production of small steel castings from carbon and low-alloy steels for armored vehicles. Technological processes of production of typical representatives from the nomenclature of the foundry complex by the technology of green sand mold casting and a special method of casting have also been developed.

As a result of the master's dissertation the production program of the enterprise is analyzed, the calculations of the main technological departments of the foundry complex of the plant are calculated, the type of calculated technological equipment is determined, the planning of the complex is developed. The technology of making green sand mold casting from low-alloy steel and the technology of investment castings from carbon steel have been developed. The basic parameters are calculated and the equipment of the mixture preparation department for the preparation of the molding mixture is designed. Calculations of technical and economic indicators of the foundry complex were performed and a start-up project was developed.

FOUNDRY COMPLEX, ARMORED PLANT, STEEL CASTING, GREEN SAND  
MOLD CASTING, INVESTMENT CASTING, CARBON STEEL, ALLOY STEEL