

## **Theoretical and technological principles of management by the special properties of the high-alloyed alloys for the poured details of the especially responsible setting**

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### **Results.**

New approaches are developed to determination of chemical composition of alloys for making of the poured details from heat-resistant and wearproof alloys on the basis of iron. Smallalloying and modifying elements, their action, are certain on properties of alloys and optimum correlations for work of the poured details in extreme terms. The methods of determination of kinetics of oxidization of heat-resistant alloys are developed in different aggressive environments, them firmness against oxidization, heat-resistance, steady to growth and wearproof. Parameters which substantially influence on the processes of making of the high-quality foundings from the high-alloyed alloys on the basis of iron are set. Developed technological processes of smelting of base alloys and introduction in them of Smallalloying and modifying additives for different external environments of the poured details. Management principles are developed by the special properties of alloys during making from them of foundings the methods of the rational alloying, мікролегування and modification. Developed method of construction of a parameter is a diagrams which enable to determine duration of exploitation of the poured details in the conditions of high temperatures and aggressive environments. The technological processes of making of foundings of the responsible setting for work in extreme terms are developed and approved in production terms.