

SUMMARY

Report on pre-graduation practice student gr. FS-22

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on "Electro-technology recycling
noncompact waste copper alloys "

The report of the pre-diploma practice are the results on the development of electro-based non-consumable electrode process of new effective technologies of waste noncompact copper alloy to obtain high-quality castings.

REPORT pre practices contained 30 pages of printed text. The report consists of an introduction, three chapters, conclusions, list of references.

The introduction proved the relevance of the chosen research topics described purpose of pre-diploma practice and its problems.

The first part of the report is devoted to analysis of existing methods of recycling copper alloy and prospects of electroslag. These schemes electroslag smelting and refining.

The second part of the report presents shlakoformuyuchi starting materials and equipment for electroslag smelting and refining of copper alloy noncompact waste.

In the third part of the report presents the results of research conduct alloying elements in electro smelting waste BrH bronze.

In the conclusions of the report summarizes the results and given them an explanation. As a result of pre-diploma practice have been resolved following tasks: A literature review on the topic of research methodology of studies conducted themselves handled the study and research results. According to the results of the pre-diploma practice made the following conclusions:

1. The behavior of chromium shavings with electro smelting bronze BrH. Established that for the stability of the chemical composition, melting of the bronze necessary be under bezkremniyevy slag.
2. The possibility of electroslag smelting chrome bronze BrH from waste copper doped with chromium by restoring it from a shlatsi Cr_2O_3 . The resulting alloy has a chromium content of 0.42 - 0.88%.

Keywords: ESR, electro-slag remelting, copper alloys, refining.