Abstract

The utilization of low-grade titanium sponge plasma melting duhovыm

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Coursework consists of an introduction, two chapters, conclusions contained 34 pages, contains 2 tables and 6 figures.

The work is devoted to research of influence of parameters compacting under current bulk charge density of titanium materials for pressed blanks expense and the impact of the physical properties of the metal itself and its fractions zkompaktovanoyi the quality of the workpiece.

We consider the current state of the problem non-compact titanium remelting charge, sources of impurities in titanium sponge and its behavior during its preparation; Characteristics of non-compact titanium charge; The chemical composition sponge-TV TG and TG-100. As a result of experiments established the best time passing electric current through the charge in terms of power consumption and density obtained samples.

Research work conducted at the Institute of Electric and equipment to them. Paton NAS of Ukraine.

Keywords: titanium sponge TG-TV, PPPs, effort, pressing, pressed titanium billets, relative density, bulk charge materials.