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Special Titanium-Containing Coating Application Technology(Article)

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Краткое описание Просмотров пристатейных ссылок (6)

The article provides results of production process development for titanium-containing coating deposition by diffusion sintering of metal pastes in vacuum. Coating preparation on steel 20 specimens is studied. A paste is applied to specimens by a screen printing scheme in order to stabilize applied layer thickness. Diffusion sintering of a metal coating in a vacuum furnace is conducted at three different temperatures: 800, 1000, and 1200 °C. The distribution and variation of the number of chemical elements and microhardness values in an applied coating, the diffusion (transition) zone, and the base metal is studied. The change in the phase composition of a titanium-containing coating at a surface is determined. © 2019, Springer Science+Business Media, LLC, part of Springer Nature.