

Investigation of plasma metal-ceramic coatings on cutting surfaces of working bodies of machines and mechanisms

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Abstract

© Published under licence by IOP Publishing Ltd. The article describes the innovative method of strengthening the working organs of soil-cultivating machinery, which are operated in an abrasive medium. It is performed by carbo-vibro-arc surfacing of working bodies using composite metal ceramic pastes with simultaneous thermodiffusion hardening of basic metal of the working body. Based on the results of the studies, the optimum composition and concentration of pasta components were determined, which ensure an increase in wear resistance of hardened working organs by an average of 1.8 ... 2.0 times.

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