

Study of processes of steels surfaces modification with highly concentrated energy flows

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Abstract

The peculiarities of steels surface layer modification under the influence of highly concentrated energies which increase the parts and tools quality have been studied. Here are the results of microstructure studies of tool steels and steel 45 samples for the analysis of strengthened steel and surface layer formation conditions. The conditions for the required quality of modified surfaces achievement using nitriding, hardening and cladding.

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