Nanocomposites and nanomaterials

Effect of chemical treatment on the structure of composite coating

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Changing recipes solutions for chemical processing and diffusion regimes chrome material and the product can be obtained surface hardened layers of different morphology (different structure) [1].

Retrieved surface layer, which is fine-dyspersated carbide composite structure area that has a higher microhardness and sufficient ductility. It is used for parts that are in friction pairs under conditions of dynamic loads.

For parts that require high resource work, reinforcing coating applied to high thickness -250 mm. Such details can be processed several times during their gradual deterioration.

Work surface heavily loaded parts operating at high unit pressures are applied coating reinforced, composite zone in which there is a high content of chromium carbides and large microhardness. The presence of Ni content in the homogeneous zone positively influence the work of such details.

1. *Stetsko A.E.* Technological support service life of manufactured and remanufactured parts: a monograph. – Lviv: Publishing company "ARS", 2013. – **240** p.