

Influence of electrolysis regimes on composite electroplate generation and structure

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Abstract

A study is made of periodic current parameters with a reverse anodic component influencing structural features of coats of zirconium carbide and aluminium oxide on a nickel matrix. A rise in the coherent dissipation area with increasing cathodic component results in lower micropotentials, higher adhesion to a substrate and better microhardness. Promotion of nucleation and uniform microtexture are responsible for the ordered distribution of disperse particles within the matrix and for their fractional selection in the coat.
