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MICRO STRUCTURAL AND X-RAY ANALYSIS OF NITRO-OXIDATED ANTENED STEELS

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ABSTRACT

The article examines the structural and phase changes of surface diffusion nitride-oxide coatings obtained in the process of nitriding in a gas medium followed by oxidation in water vapor of ferrite-pearlite steels, as well as the effect of phase changes on corrosion properties. The combination of the process of gas nitriding in an ammonia medium followed by oxidation in water vapor (nitro-oxidation) consists in the fact that at the first stage of saturation, nitriding is carried out in a gas atmosphere, and at the second stage, the nitride layer is oxidized in superheated steam.

KEYWORDS: *Ferrite, Pearlite, Nitriding, Oxidation, Diffusion Coating, Nitride Layer, Oxide Layer, Corrosion Resistance.*

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