

Method for formation of wear-proof coating on the surface of an article made of structural steel includes cleaning of the surface of the article and ion-plasmic nitration in the medium of reactive gas – nitrogen. Before the ion-plasmic nitration one performs ion-plasmic coating of the surface of the article with mono- or multi-composite layer of pure nitride-forming metals, at that one applies to the article voltage of alternating or direct current with negative pole, with value 50...150 V at pressure of reactive gas $4 \cdot 10^{-2}$ - $8 \cdot 10^{-2}$ Pa at rate of sedimentation 1...3 mkm/h during 30...90 minutes at temperature 120...200°C, after that the temperature is increased at rate 3...10°C min. up to 550°C with ion-plasmic nitration; at that one applies to the article voltage of alternating current with frequency 50...10000 Hz or direct current with negative pole, with value 300...600 V at pressure of the reactive gas 1...10 Pa.