

PLASMA MODIFICATION OF THE SURFACE OF CONSTRUCTIONAL MATERIALS

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S u m m a r y

Methods applied in mechanical engineering for the plasma modification of metal surfaces have been discussed with a special emphasis being put on the advantages of promising ion-plasma technologies. The results of our researches devoted to the volume arc discharge supplied by a plasma source of electrons fabricated as a hollow cathode with gas-magnetron heating have been presented. The advantages and shortcomings of energy efficient plasma-diffusion technologies for nitriding in glowing and volume arc discharges, as well as the prospects of their development, have been analyzed.