

Title (en)

METHOD FOR NITRO-CARBURIZATION OF METAL WORKPIECES

Title (de)

VERFAHREN FÜR DIE NITROCARBURIERUNG METALLISCHER WERKSTÜCKE

Title (fr)

PROCEDE POUR LA NITRO-CARBURATION DE PIECES METALLIQUES

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Application

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Abstract (en)

[origin: WO0114611A1] The invention relates to a known method for nitro-carburization of metal workpieces, whereby the workpieces are treated in a treatment chamber with a treatment atmosphere containing nitrogen, carbon monoxide and hydrogen at treatment temperature, whereby carbon dioxide is used as carbon contributor to generate the treatment atmosphere. The invention aims at modifying said method so as to be able to regulate as much as possible the type and volume of nitride formation. To this end, a gas flow (1; 21) containing carbon dioxide is introduced into a reactor (4; 24) connected upstream from the treatment chamber (6; 27) and modified therein into a carburizing gas (5; 25) by reaction with a hydrogen contributor (2; 22) at a reaction temperature above treatment temperature, said gas having a higher carbon activity at treatment temperature than the gas flow (1; 21) containing carbon dioxide.

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