

Title (en)

PROCESS FOR THE ANTI-OXIDISING SURFACE TREATMENT OF STEEL PARTS

Title (de)

VERFAHREN FÜR ANTIOXIDIERENDE OBERFLÄCHENBEHANDLUNG VON STAHLTEILEN

Title (fr)

PROCÉDÉ DE TRAITEMENT ANTIOXYDANT DE SURFACES DE PIÈCES EN ACIER

Publication

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Application

EP 12766159 A 20120626

Priority

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Abstract (en)

[origin: WO2014002120A1] A process and a plant are described, for the anti- oxidising surface treatment of steel parts, that perform the steps of: washing or de-greasing a charge of components; nitriding under gaseous phase the charge, composed of the sub-steps of: pre- heating with nitrogen till a temperature of 350 °C; heating from 350 °C to 450 °C in an atmosphere composed of a mixture containing CO₂ and N₂; heating from 450 °C to 520 - 600 °C for half an hour in an atmosphere containing N₂; maintaining, at the same temperature of 520 - 600 °C, for a period from 2 to 10 hours, in an atmosphere composed of a mixture containing NH₃ and N₂; washing with nitrogen the environment where said nitriding occurred; and steam oxidising, consisting in the immission of overheated steam at a temperature in the range from 490 °C and 540 °C for the necessary time to obtain a complete oxygen-iron exchange.

IPC 8 full level

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