Title (en)

FLAT STEEL PRODUCT WITH A HIGH DEGREE OF AGING RESISTANCE, AND METHOD FOR PRODUCING SAME

Title (de)

STAHLFLACHPRODUKT MIT GUTER ALTERUNGSBESTÄNDIGKEIT UND VERFAHREN ZU SEINER HERSTELLUNG

Title (fr)

PRODUIT PLAT EN ACIER POSSÉDANT UNE BONNE RÉSISTANCE AU VIEILLISSEMENT ET SON PROCÉDÉ DE FABRICATION

Publication

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Application

EP 18736938 A 20180711

Priority

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- EP 2018068767 W 20180711

Abstract (en)

[origin: WO2019016041A1] The invention relates to a coated flat steel product which is suitable for press hardening and which exhibits a particularly high degree of aging resistance and to a method for producing same. In addition to iron and unavoidable impurities, the steel of the flat steel product consists of (in weight percents) 0.10 - 0.4 % C, 0.05 - 0.5 % Si, 0.5 - 3.0 % Mn, 0.01 - 0.2 % Al, 0.005 - 1.0 % Cr, 0.001 - 0.2 % V, ≤ 0.1 % P, ≤ 0.05 % S, ≤ 0.02 % N, and optionally one or more of the elements "B, Ti, Nb, Ni, Cu, Mo, W" in the following percentages B: 0.0005 - 0.01 %, Ti: 0.001 - 0.1 %, Nb: 0.001 - 0.1 %, Ni: 0.01 - 0.4 %, Cu: 0.01 - 0.8 %, Mo: 0.002 - 1.0 %, W: 0.001 - 1.0 %. The flat steel product has a yield limit with a continuous curve or a yield limit with a difference between the upper yield limit value and the lower yield limit value of maximally 45 MPa and a uniform elongation Ag of at least 11.5%.

IPC 8 full level

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CPC (source: CN EP US)

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Citation (opposition)

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DOCDB simple family (application)

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