

Title (en)
FLAT STEEL PRODUCT AND METHOD FOR THE PRODUCTION THEREOF

Title (de)
STAHLFLACHPRODUKT UND VERFAHREN ZU SEINER HERSTELLUNG

Title (fr)
PRODUIT PLAT EN ACIER ET SON PROCÉDÉ DE FABRICATION

Publication
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Application
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EP 2017074642 W 20170928

Abstract (en)
[origin: WO2019063081A1] The invention relates to a bake hardening treatment of a suitable very high-strength flat steel product and to a method for producing such a flat steel product. The flat steel product consists of a steel that consists of (in wt%) 0.1-0.5% C, 1.0-3.0% Mn, 0.5-2.0% Si, 0.01-1.5% Al, 0.001-0.008% N, up to 0.02% P, up to 0.005% S and optionally one or more of the following elements: 0.01-1.0% Cr, 0.01-0.2% Mo, 0.001-0.01% B, and optionally a total of 0.005-0.2% V, Ti and Nb, the Ti proportion not being more than 0.10%, and, as the remainder, iron and unavoidable impurities. The flat steel product has a microstructure that consists of not more than 15 area % ferrite, not more than 5 area % bainite, at least 5 volume % residual austenite and at least 80 area % martensite, of which at least 75 area % is tempered martensite.

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