

Title (en)

METHOD FOR MAKING HARDENABLE STEEL PLATES BY FIRING, RESULTING STEEL PLATES

Title (de)

VERFAHREN ZUR HERSTELLUNG VON WÄRMEHÄRTBAREN STAHLBLECHEN DURCH GLÜHUNG, STAHLBLECHE UND DAVON HERGESTELLTE TEILE

Title (fr)

PROCEDE DE FABRICATION DE TOLES D'ACIER DURCISSABLES PAR CUISSON, TOLES D'ACIER ET PIECES AINSI OBTENUES

Publication

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Application

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Abstract (en)

[origin: US2006157166A1] The invention concerns a method for making hardenable steel plates by firing comprising: preparing a steel whereof the composition comprises, expressed in weight percent: 0.03=C=0.06, 0.50=Mn=1.10, 0.08:=Si=0.20, 0.015=Al=0.070, N=0.007, Ni=0.040, Cu=0.040, P=0.035, S=0.015, Mo=0.010, Ti=0.005; provided that it comprises boron in an amount such that 0.64=B/N=1.60 the rest consisting of iron and impurities resulting from production; casting a slab of said steel, then hot rolling of said slab to obtain a plate, the final rolling temperature being higher than the point Ar₃; winding said plate at a temperature ranging between 500 and 700° C.; then cold rolling of said plate at a reduction rate ranging between 50 and 80%; continuous annealing heat treatment for a time interval less than 15 minutes; and strain hardening with a reduction rate ranging between 1.25 and 2.5%. The invention also concerns the hardenable plates and the parts obtainable therefrom.

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