Title (en)

Process for manufacturing weldable high-tensile steel sheets and use of these sheets.

Title (de)

Verfahren zur Herstellung eines hochfesten schweissgeeigneten Bleches und dessen Verwendung.

Title (fr)

Procédé de fabrication de tÔles soudables à haute résistance mécanique et leur application.

Publication

EP 0481575 B1 19950628 (DE)

Application

EP 91250279 A 19911011

Priority

DE 4033700 A 19901019

Abstract (en)

[origin: EP0481575A2] A process for manufacturing a thick-walled sheet and the use and application thereof, from steel having a yield strength of 420-500 but especially higher than 500 N/mm<2>, which has a ferritic-perlitic microstructure, high toughness and good weldability, are proposed. A continuous casting ingot having a composition in % by weight of 0.02 to 0.10 % C 0.05 to 0.50 % Si 1.00 to 2.00 % Mn max. 0.02 % P max. 0.01 % S 0.015 to 0.08 % Al max. 0.01 % N 0.30 to 1.60 % Ni 0.20 to 1.60 % Cu 0.04 to 0.10 % V 0.01 to 0.05 % Nb 0.01 to 0.04 % Ti the remainder being iron and unavoidable impurities, is heated to temperatures greater than 1200 DEG C, cooled in air to a surface temperature of less than 1000 DEG C and then thermomechanically rolled without interval between passes at a final rolling temperature of about 750 to 650 DEG C, and the sheet is then cooled in still air or in a stack to less than 200 DEG C and finally, after heating to about 420 to 610 DEG C, again cooled in air to room temperature. <IMAGE>

IPC 1-7

C21D 8/02; C22C 38/08; C22C 38/16

IPC 8 full level

C21D 8/02 (2006.01); **C22C 38/08** (2006.01); **C22C 38/16** (2006.01)

CPC (source: EP)

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