

Title (en)

Process for manufacturing high tensile strength hot rolled steel sheet for forming and especially for deep drawing

Title (de)

Verfahren zur Herstellung von warmgewalztem, hochfestem Stahlblech zur Umformung und insbesondere zum Tiefziehen

Title (fr)

Procédé de réalisation d'une bande de tôle laminée à chaud à très haute résistance, utilisable pour la mise en forme et notamment pour l'emboutissage

Publication

**EP 1099769 B1 20040317 (FR)**

Application

**EP 00402987 A 20001027**

Priority

FR 9914187 A 19991112

Abstract (en)

[origin: EP1099769A1] Producing a hot rolled steel sheet includes forming the sheet  $\leq 880$  degrees C, initially cooling for  $\leq 10$  s, further cooling at 20-150 degrees C/sec to 700-750 degrees C, further cooling at 3-20 degrees C/sec, depending on the sheet thickness, to 640-700 degrees C and then controlled cooling at 20-150 degrees C/sec to 350-550 degrees C. The steel comprises 0.12-0.25% C, 1-2 % Mn, 0.03-2.5% Al, 0.04-2% Cr, 0.02-0.09 % P and  $\leq 0.01\%$  S. An Independent claim is included for a hot rolled steel sheet produced as above. Preferred Features: The steel may also include  $\leq 0.15\%$  titanium,  $\leq 0.15\%$  Nb and  $\leq 0.15\%$  V.

IPC 1-7

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IPC 8 full level

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CPC (source: EP US)

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Cited by

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