

Title (en)

Process for manufacturing steel flat products from a steel forming martensitic structure

Title (de)

Verfahren zum Herstellen von Stahl-Flachprodukten aus einem ein martensitisches Gefüge bildenden Stahl

Title (fr)

Procédé de fabrication de produits plats en acier à partir d'un acier formant une structure martésitique

Publication

EP 1918403 B1 20090527 (DE)

Application

EP 06123137 A 20061030

Priority

EP 06123137 A 20061030

Abstract (en)

[origin: EP1918403A1] The method for the production of flat steel products useful in automotive industry, comprises casting a steel into a cast strip having a thickness of 1-4 mm, hot-rolling the cast strip in-line into a hot-rolled strip having a thickness of higher than 1.5 mm in a continuous process at 900-1050[deg] C, and coiling the hot-rolled strip at 550-620[deg] C to obtain a hot-rolled strip, which has a minimum tensile strength R m of 1400 MPa and a minimum breaking elongation A 8 0 of 5%. The hot-rolled strip is cold-rolled with a thickness of 0.5-1.4 mm at 750-850[deg] C to obtain a cold-rolled strip. The method for the production of flat steel products useful in automotive industry, comprises casting a steel into a cast strip having a thickness of 1-4 mm, hot-rolling the cast strip in-line into a hot-rolled strip having a thickness of higher than 1.5 mm in a continuous process at 900-1050[deg] C, and coiling the hot-rolled strip at 550-620[deg] C to obtain a hot-rolled strip, which has a minimum tensile strength R m of 1400 MPa and a minimum breaking elongation A 8 0 of 5%. The steel forms a complex phase structure. The shaping degree is greater than 20%. The width of the hot-rolled strip is more than 1.600 mm. The hot-rolled strip is cold-rolled with a thickness of 0.5-1.4 mm at 750-850[deg] C to obtain a cold-rolled strip, which has a minimum tensile strength of 600 MPa and a minimum breaking elongation A 8 0 of 15%. The cold- or hot-rolled strip is provided with a metallic coating, which is galvanizing.

IPC 8 full level

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Cited by

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