

Title (en)

Process for manufacturing steel flat products from boron microalloyed multi phase steel

Title (de)

Verfahren zum Herstellen von Stahl-Flachprodukten aus einem mit Bor mikrolegierten Mehrphasenstahl

Title (fr)

Procédé pour la fabrication de produits plats à partir d'un acier à plusieurs phases micro-allié en bore

Publication

EP 1918406 B1 20090527 (DE)

Application

EP 06123139 A 20061030

Priority

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Abstract (en)

[origin: EP1918406A1] The method for the production of flat steel products useful for 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 a final hot-rolling temperature at 800-1100[deg] C and coiling the hot-rolled strip at a coiling temperature of 250-570[deg] C to obtain a hot-rolled strip, which has a minimum tensile strength R m of 800 MPa and a minimum breaking elongation A 8 0 of 5%. The method for the production of flat steel products useful for 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 a final hot-rolling temperature of 800-1100[deg] C and coiling the hot-rolled strip at a coiling temperature of 250-570[deg] C to obtain a hot-rolled strip, which has a minimum tensile strength R m of 800 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 800 MPa and a minimum breaking elongation A 5 0 of 10%. The cold or hot-rolled strip is provided with a metallic coating, which is galvanizing. The hot-rolled temperature is 900-1020[deg] C and the coiling temperature is 420-490[deg] C, when the minimum breaking elongation A 8 0 of the obtained hot-rolled strip is 10%. The hot-rolled temperature is 900-1100[deg] C and the coiling temperature is 450-570[deg] C, when the minimum tensile strength of the obtained hot-rolled strip is 1000 MPa.

IPC 8 full level

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Cited by

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