

Title (en)
METHOD FOR PRODUCING NON GRAIN-ORIENTED ELECTRIC SHEETS

Title (de)
VERFAHREN ZUM HERSTELLEN VON NICHTKORNIORIENTIERTEM ELEKTROBLECH

Title (fr)
PROCEDE DE FABRICATION DE TOLE ELECTRIQUE A GRAINS NON ORIENTES

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Abstract (en)
[origin: US2003188805A1] The invention relates to a method for producing non-grain-oriented hot-rolled magnetic steel sheet in which from a raw material such as cast slabs, strip, roughed strip or thin slabs produced from a steel comprising (in weight %) C: 0.0001-0.05 %; Si: ≤ 1.5 %; Al: ≤ 0.5 %, wherein $[\% \text{ Si}] + 2[\% \text{ Al}] \leq 1.8$; Mn: 0.1-1.2 %; if necessary up to a total of 1.5 % of alloying additions such as P, Sn, Sb, Zr, V, Ti, N, Ni, Co, Nb and/or B, with the remainder being iron and the usual impurities, in a finishing roll line at temperatures above the Ar1 temperature, a hot strip with a thickness ≤ 1.5 mm is rolled, wherein at least the last forming pass of hot rolling is carried out in the mixed region austenite/ferrite and wherein the total deformation ϵ_{H} achieved during rolling in the mixed region austenite/ferrite is < 35 %. With the method according to the invention, it is possible in particular to economically produce thicker magnetic steel sheet which is not grain-oriented and which has good magnetic properties.

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