

Title (en)

METHOD FOR PRODUCING NON-GRAIN ORIENTED ELECTRIC SHEET STEEL

Title (de)

VERFAHREN ZUM HERSTELLEN VON NICHT KORNIORIENTIERTEM ELEKTROBLECH

Title (fr)

PROCEDE DE PRODUCTION DE TOLE ELECTRIQUE A GRAINS NON ORIENTES

Publication

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Application

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Abstract (en)

[origin: US6773514B1] The present invention relates to a method for producing non grain-oriented magnetic steel sheets in which hot strip is produced from an input stock such as cast slabs, strip, roughed strip, or thin slabs, made of steel comprising (in weight %) C: 0.001-0.05%; Si: $\leq 1.5\%$; Al: $\leq 0.4\%$ with $\text{Si}+2\text{Al} \leq 1.7\%$; 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 as well as the usual accompanying elements; in that the input stock is hot-rolled directly from the casting heat or after preceding reheating to a reheating temperature between min. 1000° C. and max. 1180° C. in several deformation passes, and subsequently coiled, wherein during hot-rolling at least the first deformation pass takes place in the austenitic region and at least one further deformation pass takes place in the two-phase mixing region austenite/ferrite, and wherein during rolling in the two-phase mixing region a total deformation epsilon of at least 35% is achieved.

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