

Title (en)

Method of manufacturing a high Mn non-magnetic steel sheet for cryogenic temperature use

Title (de)

Verfahren zum Herstellen eines nicht-magnetischen, hoch mangan enthaltenden Stahlblechs für kryogene Verwendungen

Title (fr)

Procédé de fabrication d'un acier non-magnétique à haute teneur en manganèse pour applications cryogéniques

Publication

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Application

EP 00101428 A 20000125

Priority

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Abstract (en)

A method of manufacturing a high Mn non-magnetic steel sheet having low permeability at a cryogenic temperature suitable for use in large scale particle accelerators, the method comprises rolling a steel material containing, on the wt% basis, from 0.05 to 0.18% of C, from 26.0 to 30.0% of Mn, from 5.0 to 10.0% of Cr, 0.05 to 0.15% of N and, optionally, from 0.50 to 5.0% of Ni, in which a rolling start temperature is from 1050 to 1200 DEG C and a rolling end temperature is from 700 to 1000 DEG C. Further, a cold rolled sheet is annealed at an annealing temperature for cold rolled sheet of from 1050 to 1200 DEG C and cooled after annealing, the annealed sheet being preferably applied with temper rolling under control for the strength by varying a draft ratio. <IMAGE>

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