

Title (en)
LOW-DENSITY HOT- OR COLD-ROLLED STEEL, METHOD FOR IMPLEMENTING SAME AND USE THEREOF

Title (de)
WARM- ODER KALTGEWALZTER STAHL MIT NIEDRIGER DICHT, VERFAHREN ZUR REALISIERUNG DAVON UND VERWENDUNG DAVON

Title (fr)
ACIER LAMINE A CHAUD OU A FROID A FAIBLE DENSITE, SON PROCEDE DE MISE EN OEUVRE ET SON UTILISATION

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Application
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Priority

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Abstract (en)
[origin: WO2013178887A1] The invention relates to a sheet of rolled steel having mechanical strength no lower than 600 MPa and elongation at break no lower than 20 % as well as to the method for manufacturing same. The chemical composition of the sheet of the invention includes: 0.10 % <= C <= 0.30 %, 6.0 % <= Mn <= 15.0 %, 6.0 % <= Al <= 15.0 %, and optionally one or more elements selected among: Si <= 2.0 %, Ti <= 0.2 %, V <= 0.6 % and Nb <= 0.3 %, the rest of the composition comprising iron and inevitable impurities that result from the production process. The weight ratio of manganese to aluminium is such that: (I). The microstructure of the sheet according to the invention consists of ferrite, austenite and up to 5 % of kappa precipitates as a surface fraction.

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