

Title (en)

HIGH STRENGTH THIN STEEL SHEET HAVING EXCELLENT PLATING AND ELONGATION PROPERTY AND THE METHOD FOR MANUFACTURING THE SAME

Title (de)

HOCHFESTES DÜNNES STAHLBLECH MIT HERVORRAGENDER PLATTIERUNGS- UND DEHNUNGSEINGESCHAFT UND HERSTELLUNGSVERFAHREN DAFÜR

Title (fr)

TOLE MINCE DE HAUTE RESISTANCE PRESENTANT D'EXCELLENTES PROPRIETES DE REVETEMENT ET D'ALLONGEMENT, ET SON PROCEDE DE FABRICATION

Publication

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Application

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Abstract (en)

[origin: WO2007066955A1] Provided is a high-strength, thin steel sheet for deep-drawing which is largely used for automotive interior panels and has excellent plating and elongation properties, and a method for manufacturing the same. The thin steel sheet for deep-drawing having excellent plating and elongation properties comprises (i) less than 0.01 wt% of carbon, less than 0.3 wt% of silicon, 0.03-0.2 wt% of manganese, less than 0.15 wt% of phosphorus, 0.003-0.015 wt% of sulfur, 0.1-0.4 wt% of soluble aluminum (Sol.Al), less than 0.01 wt% of nitrogen, 0.003-0.01 wt% of titanium, 0.003-0.04 wt% of niobium, 0.0002-0.002 wt% of boron, less than 0.05 wt% of molybdenum, 0.005-0.2 wt% of copper, 0.05-0.5 wt% of chromium, 0.02-0.1 wt% of antimony, and the balance of Fe with inevitable impurities, and ii) more than 75% MnS, CuS and (Mn,Cu)S precipitates having a size of less than 20 nm. The present invention can provide a thin steel sheet for deep-drawing, having tensile strength of more than 440 MPa and excellent plating and elongation properties.

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