

Title (en)
COLD ROLLED STEEL SHEET AND PLATED STEEL SHEET WHICH HAVE EXCELLENT BAKE-HARDENABILITY AND ROOM-TEMPERATURE ANTIAGING PROPERTY, AND MANUFACTURING METHODS THEREFOR

Title (de)
KALTGEWALZTES STAHLBLECH UND PLATTIERTES STAHLBLECH MIT AUSGEZEICHNETER RÜCKHÄRTBARKEIT UND ALTERUNGSSCHUTZEIGENSCHAFT BEI RAUMTEMPERATUR SOWIE HERSTELLUNGSVERFAHREN DAFÜR

Title (fr)
TÔLE D'ACIER LAMINÉE À FROID ET TÔLE D'ACIER PLAQUÉE QUI PRÉSENTENT UNE EXCELLENTE APTITUDE AU DURCISSEMENT PAR CUISSON ET UNE EXCELLENTE PROPRIÉTÉ ANTI-VIEILLISSEMENT À TEMPÉRATURE AMBIANTE, ET LEURS PROCÉDÉS DE FABRICATION

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Abstract (en)
A cold rolled steel sheet having excellent bakehardenability and room-temperature anti-aging property, according to one aspect of the present invention, comprises, by wt%, 0.002-0.015%, of C, 1.5-3.0% of Mn, 0.03% or less of P, 0.01% or less of S, 0.01% or less of N, 0.02-0.06% of sol. Al, 1.2% or less of Cr (excluding 0%), and the balance of Fe and inevitable impurities, comprises, as a microstructure, ferrite, which is a matrix structure, and the balance of hard tissue, and has a hard tissue occupancy ratio (V) that can be 70% or more in grain boundary triple points defined by the following relation 1. [Relation 1] $V(\%) = \{V_{tp} / (V_{gb} + V_{tp})\} \times 100$ In relation 1, V_{gb} means the number of hard tissues observed in ferrite grain boundaries within an observation region, and V_{tp} means the number of hard tissues observed in ferrite grain boundary triple points within the observation region.

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