

Title (en)

HIGH STRENGTH COLD ROLLED STEEL SHEET HAVING EXCELLENT FORMABILITY AND COATING PROPERTY, ZINC-BASED METAL PLATED STEEL SHEET MADE OF IT AND THE METHOD FOR MANUFACTURING THEREOF

Title (de)

HOCHFESTES KALTGEWALTES STAHLBLECH MIT HERVORRAGENDER VERFORMBARKEITS- UND BESCHICHTUNGSEIGENSCHAFT, AUS DIESEM BLECH HERGESTELLTES AUF BASIS VON ZINK PLATTIERTES STAHLBLECH UND HERSTELLUNGSVERFAHREN DAFÜR

Title (fr)

TOLE D'ACIER LAMINEE A FROID DE HAUTE RESISTANCE POSSEDANT UNE EXCELLENTE PROPRIETE DE FORMABILITE ET DE REVETEMENT, TOLE D'ACIER PLAQUEE DE METAL A BASE DE ZINC FABRIQUEE A PARTIR DE CETTE TOLE ET PROCEDE DE FABRICATION DE CELLE-CI

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Application

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Abstract (en)

[origin: WO2007067014A8] Provided is a high-strength cold rolled steel sheet and a high-strength zinc-coated steel sheet, which are primarily used as a structural member and a reinforcement of the car body, and has excellent formability and coating properties; and methods for manufacturing the same. The steel sheet comprises 0.01-0.2 wt% of carbon (C), 0.01-2.0 wt% of silicon (Si), 0.5-4.0 wt% of manganese (Mn), less than 0.1 wt% of phosphorous (P), less than 0.03 wt% of sulfur (S), less than 1.0 wt% of soluble aluminum (Sol. Al), 0.001-0.1 wt% of nitrogen (N), 0.005-1.0 wt% of antimony (Sb), and the balance of iron (Fe) with inevitable impurities. Provided is also a zinc-coated steel sheet and preparation thereof using the same steel sheet. According to the present invention, excellent coating properties and high tensile strength of more than 490 MPa can be achieved. In addition, the formability of TS * El balance having 15,000 MPaD % or higher can be secured. Further, excellent bake hardenability of a BH value having 80 MPa or higher can be obtained.

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