

Title (en)

Iron-zinc alloy plated steel sheet having two plating layers and excellent in electropaintability and press-formability.

Title (de)

Stahlblech, beschichtet mit einer Eisen-Zinklegierung, bestehend aus zwei Schichten mit hervorragenden Eigenschaften in bezug auf Elektrotauchlackierung und Pressbarkeit.

Title (fr)

Tôle d'acier revêtue d'un alliage fer-zinc comportant deux couches et possédant une excellente aptitude à la peinture électrolytique et au formage.

Publication

EP 0480355 A2 19920415 (EN)

Application

EP 91117059 A 19911007

Priority

JP 27017190 A 19901008

Abstract (en)

An iron-zinc alloy plated steel sheet having two plating layers and excellent in electropaintability and press-formability, which comprises; a steel sheet; an alloying-treated iron-zinc alloy dip-plating layer as a lower layer formed on at least one surface of the steel sheet; and an iron-zinc alloy electroplating layer as an upper layer, formed on the iron-zinc alloy dip-plating layer. The iron content in the iron-zinc alloy dip-plating layer is from 7 to 15 wt.%, and the plating weight of the iron-zinc alloy dip-plating layer is from 30 to 120 g/m² per surface of the steel sheet. The iron content in the iron-zinc alloy electroplating layer is at least 60 wt.%. The iron-zinc alloy electroplating layer has a plurality of dots of another iron-zinc alloy; the iron content in each of the plurality of dots of another iron-zinc alloy is under 60 wt.%; the total exposed area per unit area of the plurality of dots of another iron-zinc alloy is from 5 to 50% of the unit area of the iron-zinc alloy electroplating layer; the diameter of each of the plurality of dots of another iron-zinc alloy is from 1 to 100 μm; and the total plating weight of the iron-zinc alloy electroplating layer and the plurality of dots of another iron-zinc alloy is from 1 to 10 g/m² per surface of the steel sheet.

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C23C 28/02; C25D 3/56

IPC 8 full level

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