Title (en)

STEEL SHEET PLATED WITH AL-FE ALLOY FOR HOT PRESS FORMING HAVING EXCELLENT CORROSION RESISTANCE AND HEAT RESISTANCE, HOT PRESS FORMED PART, AND MANUFACTURING METHOD THEREFOR

Title (de)

MIT EINER AL-FE-LEGIERUNG PLATTIERTES STAHLBLECH FÜR DIE WARMVERFORMUNG MIT AUSGEZEICHNETER KORROSIONSBESTÄNDIGKEIT UND HITZEBESTÄNDIGKEIT, FORMTEIL AUS EINER HEISSPRESSUNG UND VERFAHREN ZU SEINER HERSTELLUNG

Title (fr)

TÔLE D'ACIER PLAQUÉE AVEC UN ALLIAGE D'AL-FE POUR FORMAGE À LA PRESSE À CHAUD PRÉSENTANT UNE EXCELLENTE RÉSISTANCE À LA CORROSION ET UNE EXCELLENTE RÉSISTANCE À LA CHALEUR, PIÈCE FORMÉE À LA PRESSE À CHAUD ET PROCÉDÉ DE FABRICATION ASSOCIÉ

Publication

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Application

EP 19891044 A 20191129

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- KR 2019016761 W 20191129

Abstract (en)

The present invention provides a steel plate plated with an aluminum-iron alloy for hot press forming, the steel plate comprising a base steel sheet and an alloy plated layer formed on the base steel sheet, wherein the alloy plated layer comprises: an alloyed layer (I) formed on the base steel sheet and containing, by weight, Al: 5-30%; an alloyed layer (II) formed on the alloyed layer (I) and containing, by weight, Al: 30-60%; and an alloyed layer (III) formed on the alloyed layer (II) and containing, by weight, Al: 20-50%, wherein the alloy layer (II) has a FeAl(Si) alloy phase dispersed and distributed therein, the FeAl(Si) alloy phase comprising, by weight, Al: 20-50% and Si: 5-20%, and the number density of the FeAl(Si) alloy phase having a circle-equivalent diameter of 5μm or less is 103/mm2 or more.

IPC 8 full level

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CPC (source: EP KR US)

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