

Title (en)
FERRITE-AUSTENITE STAINLESS STEEL SHEET WITH EXCELLENT SHEARED END FACE CORROSION RESISTANCE

Title (de)
FERRIT-AUSTENIT-EDELSTAHLBLECH MIT HERVORRAGENDER GESCHERTER STIRNSEITENKORROSIONSBESTÄNDIGKEIT

Title (fr)
TÔLE D'ACIER INOXYDABLE FERRITIQUE-AUSTÉNITIQUE PRÉSENTANT UNE EXCELLENTE RÉSISTANCE À LA CORROSION DES FACES D'EXTRÉMITÉ CISAILLÉES

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Application
EP 16768525 A 20160314

Priority
• JP 2015065028 A 20150326
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Abstract (en)
[origin: EP3276028A1] The present invention relates to a ferritic-austenitic stainless steel sheet that is used in an atmospheric environment without performing a corrosion resistance treatment, and provides a ferritic-austenitic stainless steel sheet in which the corrosion resistance of the sheared line is improved. The ferritic-austenitic stainless steel sheet of the present invention includes, in terms of % by mass: C: 0.03% or less; Si: 0.1% to 1.0%; Mn: 0.5% to 5.0%; P: 0.04% or less; Al: 0.015% to 0.10%; Cr: 19.0% to 24.0%; Ni: 0.60% to 2.30%; Cu: 0.5% to 1.5%; Co: 0.05% to 0.25%; V: 0.01% to 0.15%; Ca: 0.002% or less; N: 0.06% to 0.20%; and S: 0.0002% to 0.0040%, with the remainder being Fe and unavoidable impurities, wherein a value of Co + 0.25V is 0.10 or more and less than 0.25, a metallic structure consists of ferrite phases and austenite phases, an average crystal grain size of the ferrite phases is 5 to 20 μm , and an average crystal grain size of the austenite phases is 2 to 10 μm , and sulfides having major axes of 1 to 5 μm exist at an amount of 5 to 20 pieces per 5 mm².

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Citation (search report)
• [I] JP 2011168838 A 20110901 - NIPPON STEEL & SUMIKIN SST
• [I] EP 2770076 A1 20140827 - NIPPON STEEL & SUMIKIN SST [JP]
• [I] EP 2684973 A1 20140115 - NIPPON STEEL & SUMIKIN SST [JP]
• See references of WO 2016152622A1

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