

Title (en)
STEEL PLATE WITH YIELD STRENGTH AT 890MPA LEVEL AND LOW WELDING CRACK SENSITIVITY AND MANUFACTURING METHOD THEREFOR

Title (de)
STAHLPLATTE MIT STRECKGRENZE BEI 890MPA UND NIEDRIGER SCHWEISSRISSEMPFINDLICHKEIT UND HERSTELLUNGSVERFAHREN DAFÜR

Title (fr)
PLAQUE D'ACIER AYANT UNE LIMITE D'ÉLASTICITÉ DE L'ORDRE DE 890 MPA ET UNE FAIBLE SENSIBILITÉ À LA FISSURATION DE SOUDAGE ET SON PROCÉDÉ DE FABRICATION

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Application
EP 15767692 A 20150115

Priority
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Abstract (en)
[origin: EP3124640A1] A steel plate with yield strength at an 890MPa level and low welding crack sensitivity and a manufacturing method therefor. Weight percentages of components thereof are: C: 0.06-0.13wt.%, Si: 0.05-0.70wt.%, Mn: 1.20-2.30wt.%, Mo: 0-0.25wt.%, Nb: 0.03-0.11wt.%, Ti: 0.002-0.050wt.%, Al: 0.02-0.15wt.%, and B: 0-0.0020wt.%, where 2Si+3Mn+4Mo#8.5, and others being Fe and inevitable impurities. The use of controlled thermo-mechanical rolling and cooling technologies is beneficial to improvement of steel plate strength, plasticity and toughness. The yield strength of the steel plate is greater than 890MPa, the tensile strength is greater than 950MPa, the charpy impact work Akv(-20°C) is greater than or equal to 120J, and the welding crack sensitivity indicator Pcm is less than or equal to 0.25%.

IPC 8 full level
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• [I] CN 103060690 A 20130424 - BAOSHAN IRON & STEEL
• See references of WO 2015143932A1

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