

Title (en)
HIGH-STRENGTH STEEL PLATE FOR SOUR RESISTANT LINE PIPE, METHOD FOR MANUFACTURING SAME, AND HIGH-STRENGTH STEEL PIPE USING HIGH-STRENGTH STEEL PLATE FOR SOUR RESISTANT LINE PIPE

Title (de)
HOCHFESTE STAHLPLATTE FÜR SAUER GASBESTÄNDIGES LEITUNGSROHR, VERFAHREN ZUR HERSTELLUNG DAVON UND HOCHFESTES STAHLROHR MIT HOCHFESTEM STAHLBLECH FÜR SAUER GASBESTÄNDIGES LEITUNGSROHR

Title (fr)
PLAQUE D'ACIER HAUTE RÉSISTANCE POUR TUYAU DE CANALISATION RÉSISTANT À L'ACIDITÉ, SON PROCÉDÉ DE FABRICATION, ET TUYAU EN ACIER HAUTE RÉSISTANCE UTILISANT UNE PLAQUE D'ACIER HAUTE RÉSISTANCE POUR TUYAU DE CANALISATION RÉSISTANT À L'ACIDITÉ

Publication
EP 3604584 A1 20200205 (EN)

Application
EP 17903712 A 20170926

Priority
• JP 2017013405 W 20170330
• JP 2017034800 W 20170926

Abstract (en)
Disclosed is a high strength steel plate for a sour-resistant line pipe that is excellent not only in HIC resistance but also in SSCC resistance under more severe corrosion environments. The high strength steel plate for a sour-resistant line pipe has: a chemical composition containing, by mass%, C: 0.02 % to 0.08 %, Si: 0.01 % to 0.50 %, Mn: 0.50 % to 1.80 %, P: 0.001 % to 0.015 %, S: 0.0002 % to 0.0015 %, Al: 0.01 % to 0.08 %, and Ca: 0.0005 % to 0.005 %, with the balance being Fe and inevitable impurities; a steel microstructure at 0.5 mm below a surface of the steel plate being a bainite microstructure having a dislocation density of 1.0×10^{14} to 7.0×10^{14} (m⁻²); a variation in Vickers hardness at 0.5 mm below the surface of the steel plate being 30 HV or less at 3σ , where σ is a standard deviation; and a tensile strength being 520 MPa or more.

IPC 8 full level
C22C 38/00 (2006.01); **C21D 8/02** (2006.01); **C22C 38/06** (2006.01); **C22C 38/58** (2006.01)

CPC (source: EP KR)
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