

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 ZU DESSEN HERSTELLUNG UND HOCHFESTES STAHLROHR UNTER VERWENDUNG DER HOCHFESTEN STAHLPLATTE FÜR SAUER GASBESTÄNDIGES LEITUNGSROHR

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

Publication
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Application
EP 17903712 A 20170926

Priority
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Abstract (en)
[origin: EP3604584A1] 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
C21D 8/02 (2006.01); **C22C 38/02** (2006.01); **C22C 38/04** (2006.01); **C22C 38/06** (2006.01); **C22C 38/00** (2006.01); **C22C 38/12** (2006.01); **C22C 38/14** (2006.01); **C22C 38/16** (2006.01); **C22C 38/18** (2006.01); **C22C 38/20** (2006.01); **C22C 38/24** (2006.01); **C22C 38/26** (2006.01); **C22C 38/28** (2006.01); **C22C 38/58** (2006.01)

CPC (source: EP KR)
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