

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

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

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

Publication
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Application
EP 19864846 A 20190925

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Abstract (en)
[origin: EP3859026A1] 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 and environments with low hydrogen sulfide partial pressure below 1 bar. The high strength steel plate for a sour-resistant line pipe disclosed herein has: a chemical composition containing C, Si, Mn, P, S, Al, Mo, and Ca, and at least one of Nb or Ti, in predetermined amounts, with the balance being Fe and inevitable impurities; a steel microstructure at 0.25 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 0.25 mm below the surface of the steel plate being 30 HV or less at 3σ , where σ is a standard deviation; a variation in Vickers hardness in a plate thickness direction 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 6/00** (2006.01); **C21D 8/02** (2006.01); **C22C 38/02** (2006.01); **C22C 38/04** (2006.01); **C22C 38/06** (2006.01); **C22C 38/12** (2006.01); **C22C 38/14** (2006.01); **C22C 38/16** (2006.01); **C22C 38/42** (2006.01); **C22C 38/44** (2006.01); **C22C 38/46** (2006.01); **C22C 38/48** (2006.01); **C22C 38/50** (2006.01); **C22C 38/58** (2006.01)

CPC (source: EP KR RU)
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• [E] EP 3604584 A1 20200205 - JFE STEEL CORP [JP]
• [A] JP 2012077331 A 20120419 - JFE STEEL CORP
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