

Title (en)

HIGH STRENGTH STEEL PLATE FOR SOUR-RESISTANT LINE PIPE AND 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 GAS-RESISTENTE LEITUNGSROHRE UND VERFAHREN ZU IHRER HERSTELLUNG, UND HOCHFESTES STAHLROHR UNTER VERWENDUNG VON HOCHFESTEN STAHLPLATTEN FÜR SAUER GAS-RESISTENTE LEITUNGSROHRE

Title (fr)

PLAQUE D'ACIER A HAUTE RESISTANCE POUR TUYAU DE LIGNE RESISTANT A L'ACIDE ET PROCEDE DE FABRICATION, ET TUYAU EN ACIER A HAUTE RESISTANCE UTILISANT UNE PLAQUE D'ACIER A HAUTE RESISTANCE POUR TUYAU DE LIGNE RESISTANT A L'ACIDE

Publication

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Application

**EP 19865764 A 20190925**

Priority

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Abstract (en)

[origin: EP3859027A1] 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  $1.0 \times 10^{14}$  to  $7.0 \times 10^{14}$  ( $m^{-2}$ ); a variation in Vickers hardness at 0.25 mm below the surface of the steel plate being 30 HV or less at  $3\sigma$ , where  $\sigma$  is a standard deviation; and a tensile strength being 520 MPa or more.

IPC 8 full level

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