

Title (en)

HIGH-STRENGTH STEEL SHEET FOR SOUR-RESISTANT LINE PIPE, AND HIGH-STRENGTH STEEL PIPE USING SAME

Title (de)

HOCHFESTES STAHLBLECH FÜR SAUER GASRESISTENTE LEITUNGSROHRE UND HOCHFESTES STAHLROHR DAMIT

Title (fr)

TÔLE D'ACIER À HAUTE RÉISTANCE POUR TUYAU DE CANALISATION RÉISTANT À L'ACIDITÉ ET TUYAU EN ACIER À HAUTE RÉISTANCE L'UTILISANT

Publication

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Application

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Priority

JP 2017037891 W 20171019

Abstract (en)

The present disclosure provides a high strength steel plate for sour-resistant line pipes that has excellent HIC resistance in which variation in the HIC resistance in the plate width direction is suppressed. A high strength steel plate for sour line pipes disclosed herein includes a chemical composition containing C, Si, Mn, P, S, Al, and Ca in predetermined amounts, with the balance being Fe and inevitable impurities, in which in a cross-section perpendicular to a rolling direction of the steel plate, the number of Mn-concentrated spots that are approximated to an elliptical shape having a major axis length of more than 1.5 mm, in a measuring region located  $\pm 5$  mm from a plate thickness center toward a plate thickness direction, is 3 or less per 100 mm in length in a plate width direction, HIC resistance is 10 % or less in terms of CAR at a W/4 position, a W/2 position, and a 3W/4 position from one end in the plate width direction of the steel plate, where W denotes a plate width, variation in the HIC resistance in the plate width direction in terms of  $3\sigma$  is 5 % or less when  $\sigma$  denotes a standard deviation of CARs, and a tensile strength is 520 MPa or more.

IPC 8 full level

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