

Title (en)
STEEL SHEET FOR THICK-WALLED HIGH-STRENGTH LINE PIPE HAVING EXCEPTIONAL CORROSION RESISTANCE, CRUSH RESISTANCE PROPERTIES, AND LOW-TEMPERATURE DUCTILITY, AND LINE PIPE

Title (de)
STAHLBLECH FÜR DICKWANDIGES HOCHFESTES LEITUNGSROHR MIT AUSSERGEWÖHNLICHER KORROSIONSBESTÄNDIGKEIT, QUETSCHFESTIGKEITSEIGENSCHAFTEN UND DUKTILITÄT BEI NIEDRIGEN TEMPERATUREN SOWIE LEITUNGSROHR

Title (fr)
TÔLE D'ACIER POUR TUBE DE CANALISATION À PAROI ÉPAISSE ET À HAUTE RÉSISTANCE MÉCANIQUE AYANT D'EXCELLENTE CARACTÉRISTIQUES DE RÉSISTANCE À LA CORROSION ET À L'AFFAISSEMENT, ET UNE DUCTILITÉ AUX BASSES TEMPÉRATURES, AINSI QUE TUBE DE CANALISATION

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Application
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Priority

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Abstract (en)
[origin: EP3042976A1] This invention provides steel plate for thick-gauge high-strength linepipe which is excellent in sour resistance, collapse resistance, and low-temperature toughness and the method for manufacturing the same. Steel plate for thick-gauge high-strength linepipe comprises steel plate having a plate thickness of 25 mm to 45 mm, wherein a microstructure of surface layer portion is restricted to, by area percentage, deformed ferrite: 5% or more and S fe1 % found by the following formula 1a or less and martensite-austenite mixture: 8% or less and has a balance of one or both of polygonal ferrite and bainite, and a microstructure of a mid-thickness portion is restricted to, by area percentage, deformed ferrite: 5% or less, martensite-austenite mixture: 5% or less and has a balance of one or both of acicular ferrite and bainite, and the surface layer portion and mid-thickness portion have average value of effective grain size measured by electron backscatter diffraction of 20 μm or less.
#####S fe1 =0. 6552×T H -4.7826 …#####formula 1a where, T H : plate thickness of steel plate for thick-gauge high-strength linepipe

IPC 8 full level
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CPC (source: EP RU)
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