

Title (en)

THICK STEEL PLATE HAVING EXCELLENT LOW-TEMPERATURE STRAIN AGING IMPACT PROPERTY AND MANUFACTURING METHOD THEREFOR

Title (de)

DICKWANDIGE STAHLPLATTE MIT AUSGEZEICHNETEN NIEDRIGTEMPEMERATUR-RECKALTERUNGSSIMPAKTEIGENSCHAFTEN UND HERSTELLUNGSVERFAHREN DAFÜR

Title (fr)

TÔLE D'ACIER ÉPAISSE PRÉSENTANT D'EXCELLENTES PROPRIÉTÉS DE RÉSISTANCE AU VIEILLISSEMENT APRÈS CONTRAINE À BASSE TEMPÉRATURE ET PROCÉDÉ DE FABRICATION CORRESPONDANT

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Application

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Abstract (en)

The present invention relates to a thick steel plate superior in low-temperature strain aging impact properties and a manufacturing method therefor and, more particularly, to a thick steel plate that is usable as a material in ship building, marine structures, and the like and which has excellent low-temperature strain aging impact properties and a method for manufacturing the same. An embodiment of the present invention provides a thick steel plate having excellent low-temperature strain aging impact properties, the steel plate comprising, by weight: 0.04-0.1% of C; 0.05-0.4% of Si; 1.0-2.0% of Mn; 0.01% or less of P; 0.003% or less of S; 0.015-0.04% of Al; 0.005-0.02% of Ti; 0.35% or less (0 exclusive) of Cu; 0.05-0.8% of Ni; 0.003-0.03% of Nb; 0.002-0.008% of N; 0.0002-0.0050% of Ca; 0.009% or less of Cr; 0.0009% or less of Mo; and a balance of Fe and other inevitable impurities, with the microstructure thereof including 95% by area or greater of ferrite 10 µm or less in average grain size, and a manufacturing method therefor.

IPC 8 full level

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