

Title (en)

MARTENSITIC STAINLESS STEEL SEAMLESS PIPE AND A MANUFACTURING METHOD THEREOF

Title (de)

NAHTLOSES ROHR AUS MARTENSITISCHEM ROSTFREISTAHL UND VERFAHREN ZUM HERSTELLEN

Title (fr)

TUYAU SANS SOUDURE EN ACIER INOXYDABLE MARTENSITIQUE ET PROCEDE DE FABRICATION CORRESPONDANT

Publication

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Application

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Priority

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Abstract (en)

[origin: WO2004007780A1] The present invention provides a martensitic stainless steel seamless pipe, having no inner surface defect and suppressing a delayed fracture generation in the impact-worked portions, and a method for manufacturing such a seamless steel pipe. A martensitic stainless steel seamless pipe, characterized by consisting of C: 0.15 to 0.22%, Si: 0.1 to 1.0%, Mn: 0.10 to 1.00%, Cr: 12.00 to 14.00%, P: 0.020% or less, S: 0.010% or less, N: 0.05% or less, O(Oxygen): 0.0060% or less, at least one alloying element selected from V, Nb and Ti of 0.005 to 0.200 % and B of 0.0005 to 0.0100 %, and the balance Fe and impurities, satisfying either the following inequalities (1), (2), (4) and (5) or the following inequalities (1), (3), (4) and (5):  $C^* + 10N^* \leq 0.45$ , (1)  $H1 \leq -0.003(C^* + 10N^*) + 0.0016$ , (2)  $H2 \leq -0.0018(C^* + 10N^*) + 0.00096$ , (3)  $Cr^* \leq 9.0$ , (4)  $S \leq 0.088N^* + 0.00056$ , (5).

IPC 8 full level

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