

Title (en)

MARTENSITIC STAINLESS STEEL WITH IMPROVED STRENGTH AND CORROSION RESISTANCE, AND MANUFACTURING METHOD THEREFOR

Title (de)

MARTENSITISCHER EDELSTAHL MIT VERBESSERTER FESTIGKEIT UND KORROSIONSBESTÄNDIGKEIT UND HERSTELLUNGSVERFAHREN DAFÜR

Title (fr)

ACIER INOXYDABLE MARTENSITIQUE AYANT UNE RÉSISTANCE ET UNE RÉSISTANCE À LA CORROSION AMÉLIORÉES, ET SON PROCÉDÉ DE FABRICATION

Publication

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Application

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Priority

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Abstract (en)

Disclosed is a martensitic stainless steel with improved strength and corrosion resistance. The disclosed martensitic stainless steel sheet comprises, in percent by weight (wt%), 0.3 to 0.5% of C, 0.01 to 0.025% of N, 0.3 to 0.5% of Si, 0.4 to 0.6 of Mn, 13.1 to 14.5% of Cr, 0.95 to 1.10% of Mo, 0.05 to 0.3% of V, 0.3 to 0.5% of Ni, 0.001 to 0.5% of Cu, and the balance being Fe and inevitable impurities, and satisfies Formula (1). Formula (1): $16.4 \leq (Cr+3.3Mo+16N)^*(Mo+V) \leq 23.3$, wherein Cr, N, Mo, and V denote the contents (wt%) of respective elements.

IPC 8 full level

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