

Title (en)
MARTENSITIC STAINLESS STEEL MATERIAL

Title (de)
MARTENSITISCHES EDELSTAHL MATERIAL

Title (fr)
MATÉRIAU EN ACIER INOXYDABLE MARTENSITIQUE

Publication
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Application
EP 21877705 A 20211007

Priority
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Abstract (en)
A martensitic stainless steel material that has high strength and is excellent in SSC resistance is provided. A martensitic stainless steel material according to the present disclosure contains, in mass%, C: 0.030% or less, Ni: 5.00 to 7.00%, Cr: 10.00 to 14.00%, Mo: 1.50 to 3.00%, and Cu: more than 1.00 to 3.50%, and has a yield strength of 758 MPa or more. On two line segments LS of 1000 μ m extending in a wall thickness direction with arbitrary two points as a center located at positions at a depth of 2 mm from the inner surface, respectively, a degree of Cr segregation Δ Cr defined by Formula (1) described in the description, a degree of Mo segregation Δ Mo defined by Formula (2) described in the description, and a degree of Cu segregation Δ Cu defined by Formula (3) described in the description satisfy Formula (4): Δ Cr+ Δ Mo+ Δ Cu \leq A where, when the yield strength is 758 to less than 862 MPa, A in Formula (4) is 0.70, and when the yield strength is 862 MPa or more, A in Formula (4) is 0.50.

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