

Title (en)
AUSTENITIC STAINLESS STEEL AND MANUFACTURING METHOD THEREOF

Title (de)
AUSTENITISCHER EDELSTAHL UND HERSTELLUNGSVERFAHREN DAFÜR

Title (fr)
ACIER INOXYDABLE AUSTÉNITIQUE ET SON PROCÉDÉ DE FABRICATION

Publication
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Application
EP 22837831 A 20220609

Priority
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Abstract (en)
Disclosed are a ultrafine austenitic stainless steel simultaneously satisfying a high strength, a high elongation, and a high yield ratio and a method for manufacturing the same. An austenitic stainless steel according to an embodiment of the present disclosure includes, in percent by weight (wt %), 0.005 to 0.03% of carbon (C), 0.1 to 1.0% of silicon (Si), 0.1 to 2.0% of manganese (Mn), 6.0 to 12.0% of nickel (Ni), 16.0 to 20.0% of chromium (Cr), 0.01 to 0.2% of nitrogen (N), 0.25% or less of niobium (Nb), and the balance of iron (Fe) and inevitable impurities, wherein a thickness central region has an average grain size d of 5 μm or less, and a fraction of a unrecrystallized area in a band form is 10% or less.

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