

Title (en)

FERRITIC STAINLESS STEEL FOR USE IN PRODUCING UREA WATER TANK

Title (de)

FERRITISCHER EDELSTAHL ZUR VERWENDUNG BEI DER HERSTELLUNG EINES HARNSTOFFWASSERTANKS

Title (fr)

ACIER INOXYDABLE FERRITIQUE DESTINÉ À ÊTRE UTILISÉ POUR LA PRODUCTION D'UN RÉSERVOIR D'EAU-URÉE

Publication

EP 2316979 A4 20140122 (EN)

Application

EP 09800430 A 20090723

Priority

- JP 2009063169 W 20090723
- JP 2008190065 A 20080723

Abstract (en)

[origin: EP2316979A1] This ferrite stainless steel for use in producing a urea water tank includes: in terms of mass %, C: 0.05% or less; N: 0.05% or less; Si: 0.02 to 1.5%; Mn: 0.02 to 2%; Cr: 15 to 23%; and either one or both of Nb and Ti at a content within a range of 8(C+N) to 1% (herein, C and N represent the contents of C and N (expressed by mass %), respectively, and the numerical values shown in front of the atomic symbols represent constant numbers), with the remainder being iron and unavoidable impurities, wherein an effective amount of Cr expressed by any one of the following Equations (I), (II), and (III) is 15% or more (herein, the atomic symbols in Equations (I) to (III) represent the contents of the elements (expressed by mass %), and the numerical values shown in front of the atomic symbols represent constant numbers). Here, the effective amount of Cr = Cr+4Si-2Mn in the case where only Nb is contained, the effective amount of Cr = Cr+4Si-2Mn-10Ti in the case where only Ti is contained, and the effective amount of Cr = Cr+4Si-2Mn-(10Ti-3Nb) in the case where both of Nb and Ti are contained.

IPC 8 full level

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CPC (source: EP KR US)

C22C 38/001 (2013.01 - EP KR US); **C22C 38/002** (2013.01 - KR); **C22C 38/02** (2013.01 - EP KR US); **C22C 38/04** (2013.01 - EP US); **C22C 38/18** (2013.01 - EP KR US); **C22C 38/26** (2013.01 - EP KR US); **C22C 38/42** (2013.01 - KR); **C22C 38/44** (2013.01 - KR); **C22C 38/46** (2013.01 - KR); **C22C 38/58** (2013.01 - KR)

Citation (search report)

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- [A] MIOLA C ET AL: "UTILIZATION OF STAINLESS STEELS AND SPECIAL METALS IN NITRIC ACID AND UREA PRODUCTION PLANTS", MATERIALS AND CORROSION - WERKSTOFFE UND KORROSION, WILEY-VCH, WEINHEIM, DE, vol. 43, no. 8, 1 August 1992 (1992-08-01), pages 396 - 401, XP000349762, ISSN: 0947-5117, DOI: 10.1002/MACO.19920430804
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