

Title (en)

A MARTENSITIC ANTIBACTERIAL STAINLESS STEEL AND MANUFACTURING METHOD THEREOF

Title (de)

ANTIBAKTERIELLER MARTENSITISCHER EDELSTAHL UND VERFAHREN ZU SEINER HERSTELLUNG

Title (fr)

ACIER INOXYDABLE ANTIBACTÉRIEN MARTENSITIQUE ET SON PROCÉDÉ DE FABRICATION

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Application

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Abstract (en)

[origin: WO2012137070A2] This invention relates to antimicrobial martensitic stainless steels with nano precipitation and their manufacturing method of melting, forging, heat treatment. As the nano e-Cu phases are precipitated in the matrix dispersedly, the martensitic stainless steels have excellent antimicrobial properties. The martensitic stainless steels may comprise from 0.35 to 1.20 weight percent C, from 12.00 to 26.90 weight percent Cr, from 0.29 to 4.60 weight percent Cu, 0.27 weight percent as less Ag, from 0.15 to 4.60 weight percent W, from 0.27 to 2.80 weight percent Ni, from 0.01 to 1.125 weight percent Nb, from 0.01 to 1.35 weight percent V, 1.8 percent or less Mn, from 0.15 to 4.90 weight percent Mo, 2.6 weight percent or less Si, 3.6 weight percent or less RE (rare earth) and the balance Fe and incidental impurities.

IPC 8 full level

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