

Title (en)

MARTENSITIC STAINLESS STEEL, METHOD FOR THE PRODUCTION OF A SEMI-FINISHED PRODUCT FROM SAID STEEL, AND CUTTING TOOL PRODUCED FROM THE SEMI-FINISHED PRODUCT

Title (de)

MARTENSITISCHER ROSTFREIER STAHL, VERFAHREN ZUR HERSTELLUNG EINES HALBZEUGS AUS DEM STAHL UND AUS DEM HALBZEUG HERGESTELLTES SCHNEIDWERKZEUG

Title (fr)

ACIER INOXYDABLE MARTENSITIQUE, PROCÉDÉ DE FABRICATION D'UN DEMI-PRODUIT EN CET ACIER ET OUTIL DE COUPE RÉALISÉ À PARTIR DE CE DEMI-PRODUIT

Publication

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Application

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Abstract (en)

[origin: WO2016146857A1] The invention relates to a martensitic stainless steel characterised in that its composition consists of, by weight percent: 0.10% ≤ C ≤ 0.45%; traces ≤ Mn ≤ 1.0%; traces ≤ Si ≤ 1.0%; traces ≤ S ≤ 0.01 %; traces ≤ P ≤ 0.04%; 15.0% ≤ Cr ≤ 18.0%; traces ≤ Ni ≤ 0.50%; traces ≤ Mo ≤ 0.50%; traces ≤ Cu ≤ 0.50%; traces ≤ V ≤ 0.50%; traces ≤ Nb ≤ 0.03%; traces ≤ Ti ≤ 0.03%; traces ≤ Zr ≤ 0.03%; traces ≤ Al ≤ 0.010%; traces ≤ O ≤ 0.0080%; traces ≤ Pb ≤ 0.02%; traces ≤ Bi ≤ 0.02%; traces ≤ Sn ≤ 0.02%; 0.10% ≤ N ≤ 0.20%; C + N ≥ 0.25%; Cr + 16 N - 5 C ≥ 16.0%; preferably 17 Cr + 500 C + 500 N ≤ 570%; the remainder being iron and impurities resulting from production. The invention also relates to a method for the production of a semi-finished product from the aforementioned martensitic stainless steel, and a cutting tool produced from said semi-finished product.

IPC 8 full level

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