

Title (en)
CORROSION-RESISTANT AND PRECIPITATION-HARDENING STEEL, METHOD FOR PRODUCING A STEEL COMPONENT, AND STEEL COMPONENT

Title (de)
KORROSIONSBESTÄNDIGER UND AUSSCHIEDUNGSHÄRTENDER STAHL, VERFAHREN ZUR HERSTELLUNG EINES STAHLBAUTEILS UND STAHLBAUTEIL

Title (fr)
ACIER RÉISTANT À LA CORROSION ET À DURCISSEMENT PAR PRÉCIPITATION, PROCÉDÉ DE PRODUCTION D'UN COMPOSANT D'ACIER, ET COMPOSANT D'ACIER

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Abstract (en)
[origin: WO2021084025A1] According to the invention, a steel, which is characterized by high hardness and strength together with good corrosion resistance, consists of the following in mass percent: C: < 0.02%, Si: < 2.0%, Mn: < 2.0%, Cr: 14.0-18.0%, Ni: 3.0-6.0%, Cu: 2.0-4.0%, optionally Co: < 6.0%, Nb: 1.0-5.0%, optionally W: 0.45-5.0%, the sum of the concentrations of Nb and W being at least 1.0% and at most 5%, optionally Mo: 0.25-6.0%, optionally Al: 0.25-6.0%, optionally Ti: 0.25-6.0%, the sum of the concentrations of Al and Ti, if they are present, being 0.25-6.0%, P: < 0.035%, S: < 0.035%, the remainder iron and unavoidable impurities. The invention further relates to a method for producing a component, said method being based on a steel of this type, to a component produced from the steel according to the invention and to advantageous uses of the steel.

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