

Title (en)  
DUPLEX STEEL WITH IMPROVED NOTCH-IMPACT STRENGTH AND MACHINABILITY

Title (de)  
DUPLEXSTAHL MIT VERBESSERTER KERBSCHLAGZÄHIGKEIT UND ZERSPANBARKEIT

Title (fr)  
ACIER DUPLEX AYANT UN INDICE DE RÉSILIENCE ET UNE USINABILITÉ AMÉLIORÉS

Publication  
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Application  
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Abstract (en)  
[origin: WO2013113718A1] The invention relates to a duplex steel having improved notch-impact strength and machinability, wherein the duplex steel has the following chemical composition or consists of the following: C < 0.070 wt%, Si < 1.5 wt%, Mn < 1.0 wt%, Cr 21.0 to 23.0 wt%, Ni 1.0 to 3.0 wt%, Cu 1.0 to 3.0 wt%, N 0.10 to 0.30 wt%, Mo < 0.5 wt% and the remainder consisting of iron and impurities. The duplex steel according to the invention is characterised by very good weldability without the need for heat treatment, good machinability, high strength, good notch-impact strength at low temperatures (e.g. - 40° C) and is particularly suitable for pressure tanks.

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