

Title (en)

WEAR RESISTANT AUSTENITIC STEEL HAVING SUPERIOR DUCTILITY AND METHOD FOR PRODUCING SAME

Title (de)

VERSCHLEISSFESTER AUSTENITISCHER STAHL MIT AUSGEZEICHNETER DUKTILITÄT SOWIE HERSTELLUNGSVERFAHREN DAFÜR

Title (fr)

ACIER AUSTÉNITIQUE RÉSISTANT À L'USURE ET PRÉSENTANT UNE DUCTILITÉ AMÉLIORÉE, ET SON PROCÉDÉ DE PRODUCTION

Publication

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Application

EP 12862562 A 20121227

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Abstract (en)

Provided are a wear resistant austenitic steel having superior machinability and ductility and a method for producing same, the austenitic steel comprising, in weight %, 8 to 15% of manganese (Mn), carbon (C) that satisfies the relationship of $23\% < 33.5C - Mn \leq 37\%$, copper (Cu) that satisfies $1.6C - 1.4(\%) \leq Cu \leq 5\%$, 0.03 to 0.1% of sulfur (S), 0.001 to 0.01% of calcium (Ca), the remainder being Fe and other inevitable impurities. According to the present invention, austenitic steel having superior machinability is provided in which the generation of carbide in the steel is inhibited in order to prevent degradation of the steel, and corrosion resistance is sufficiently ensured to enable the steel to be used with a long service life in a corrosive environment.

IPC 8 full level

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