

Title (en)

Low interstitial, corrosion resistant, weldable ferritic stainless steel and process for the manufacture thereof.

Title (de)

Ferritischer, rostfreier, korrosionsbeständiger, schweisssbarer Stahl mit geringem Gehalt an Zwischengittersubstanzen und Verfahren zu seiner Herstellung.

Title (fr)

Acier inoxydable ferritique, à basse teneur en éléments interstitiels, soudable et résistant à la corrosion, et procédé pour sa fabrication.

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Application

EP 81305667 A 19811202

Priority

US 22556681 A 19810116

Abstract (en)

A low interstitial, corrosion resistant, weldable ferritic stainless steel has an addition of between 0.05 and 0.50% by weight columbium and/or titanium to give the steel improved toughness when the maximum achievable cooling rate is limited. The steel consists of the following composition by weight percent: between 25.0 and 35% chromium, between 3.6 and 5.6% molybdenum, between 0.05 and 0.50% of columbium and/or titanium, less than 3.0% nickel, less than 2.0% manganese, less than 2.0% silicon, less than 0.5% aluminium, less than 0.5% copper, less than 0.050% phosphorous, less than 0.050% sulfur, less than 0.01% carbon, less than 0.02% nitrogen, the carbon plus nitrogen content being less than 0.025%, and the balance iron. A process is also disclosed which comprises air-cooling a steel having the above composition from the annealing temperature before cold rolling.

IPC 1-7

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IPC 8 full level

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