

Title (en)
Duplex stainless steel

Title (de)
Duplexedelstahl

Title (fr)
Aciers inoxydables duplexes

Publication
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Application
EP 15156371 A 20100901

Priority
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Abstract (en)
[origin: EP2476771A1] [Problem to be Solved] To provide a duplex stainless steel excellent in the weldability during large heat input welding and excellent in the stress corrosion cracking resistance in a chloride environment containing corrosive associated gases. [Solution] A duplex stainless steel that has a chemical composition consisting, by mass%, of C: 0.03% or less, Si: 0.2 to 1%, Mn: 5.0% or less, P: 0.040% or less, S: 0.010% or less, sol. Al: 0.040% or less, Ni: 4 to 8%, Cr: 20 to 28%, Mo: 0.5 to 2.0%, Cu: more than 2.0% and 4.0% or less and N: 0.1 to 0.35%, and optionally contains one or more selected from among V, Ca, Mg, B and a rare earth metal(s), with the balance being Fe and impurities; wherein the duplex stainless steel satisfies the relations of the following formulas (1) and (2): wherein the symbols of elements in formulas (1) and (2) respectively represent the contents (unit: mass%) of the elements in the steel.

IPC 8 full level
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