

Title (en)

OXIDATION AND CORROSION RESISTANT AUSTENITIC STAINLESS STEEL INCLUDING MOLYBDENUM

Title (de)

OXIDATIONS- UND KORROSIONSBESTÄNDIGER, AUSTENITISCHER, MOLYBDÄN ENTHALTENDER STAHL

Title (fr)

ACIER INOXYDABLE AUSTENITIQUE CONTENANT DU MOLYBDENE ET RESISTANT A L'OXYDATION ET A LA CORROSION

Publication

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Application

EP 01965992 A 20010817

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Abstract (en)

[origin: WO0214570A1] An austenitic stainless steel comprising, by weight, 19 to 23 % chromium, 30 to 35 % nickel, 1 to 6 % molybdenum, and less than 0.8 % silicon. The addition of molybdenum to the iron-base alloys of the invention increases their resistance to corrosion at high temperatures. The austenitic stainless steel may consist essentially of, by weight, 19 to 23 % chromium, 30 to 35 % nickel, 1 to 6 % molybdenum, 0 to 0.1 % carbon, 0 to 1.5 % manganese, 0 to 0.05 % phosphorus, 0 to 0.02 % sulfur, less than 0.8 % silicon, 0.15 to 0.6 % titanium, 0.15 to 0.6 % aluminum, 0 to 0.75 % copper, iron, and incidental impurities. Austenitic stainless steels according to the present invention exhibit enhanced resistance to corrosion by salt at a broad temperature range up to at least 1500 DEG C. Thus, the stainless steel of the present invention would find broad application as, for example, automotive exhaust system components and, more particularly, as automotive exhaust system components and flexible connectors, as well as in other applications in which corrosion resistance is desired.

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C22C 38/44

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