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(54) Title: USE OF A DUPLEX STAINLESS STEEL ALLOY

(57) Abstract: The present invention relates to a stainless steel alloy, closer determined a duplex stainless steel alloy with ferritic-austenitic matrix and with high resistance to corrosion in combination with good structural stability. According to present invention these purposes are fulfilled with duplex stainless steel alloys which contain (in weight-%) up to 0,03 % C, up to 0,5 % Si, 24,0-30,0 % Cr, 4,9-10,0 % Ni, 3,0-5,0 % Mo, 0,28-0,5% N, 0-3,0 % Mn, 0-0,0030 % B, up to 0,010 %, 0-0,03 % Al, 0-0,010 % Ca, 0-3,0 % W, 0-2,0 % Cu, 0-3,5 % Co, 0-0,3 % Ru, balance Fe and inevitable impurities and which shows a content of ferrite in the range of 40 to 65 volume-% and a PRE-number of at least between 46 and 50 in both the austenite and ferrite phase and with an optimum relationship between PRE austenite and PRE ferrite in the range of 0,90 to 1,15; preferably between 0,9 and 1,05,



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