

Title (en)
LOW ALLOY STEEL

Title (de)
NIEDRIG LEGIERTER STAHL

Title (fr)
ACIER FAIBLEMENT ALLIÉ

Publication
EP 1873270 A1 20080102 (EN)

Application
EP 06745409 A 20060417

Priority
• JP 2006308018 W 20060417
• JP 2005120239 A 20050418

Abstract (en)
A low alloy steel for a heat-resisting structural member being improved in long time creep ductility at high temperatures and temper softening resistance, characterized by comprising, by mass percent, C: 0.03 to 0.10%, Si: not more than 0.30%, Mn: not more than 1.0%, Cr: more than 1.5% to not more than 2.5%, Mo: 0.01 to 1.0%, V: 0.04 to 0.30%, Nb: 0.001 to 0.10%, Ti: 0.001 to 0.020%, B: 0.0001 to 0.020%, Al: 0.001 to 0.01% and Nd: 0.0001 to 0.050%, with the balance being Fe and impurities, wherein the content of P is not more than 0.020%, the content of S is not more than 0.003%, the content of N is less than 0.0050% and the content of O (oxygen) is not more than 0.0050% among the impurities, in which the value of BSO represented by the following formula (1) is 0.0001 to 0.010: $BSO = B - (11 / 14) N - (11 / 32) S - (11 / 16) O$ wherein each element symbol in the formula (1) represents the content (by mass %) of the element concerned. The steel may further contain one or more element selected from among W, Cu, Ni, Co, Mg, Ca, La, Ce, Y, Sm and Pr.

IPC 8 full level
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Cited by
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