

Title (en)
SEAMLESS AUSTENITE HEAT-RESISTANT ALLOY TUBE

Title (de)
NAHTLOSES UND WÄRMEBESTÄNDIGES AUSTENITISCHES LEGIERUNGSROHR

Title (fr)
TUBE EN ALLIAGE RÉSISTANT À LA CHALEUR EN AUSTÉNITE SANS SOUDURE

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Application
EP 12850463 A 20121107

Priority
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Abstract (en)
A seamless austenitic heat-resistant alloy tube used by fillet-welding the outer surface thereof directly, having a chemical composition consisting, by mass percent, of C: 0.03-0.15%, Si#±1%, Mn#±2%, P#±0.03%, S#±0.01%, Ni: 35-60%, Cr: 18-38%, W: 3-11%, Ti: 0.01-1.2%, Al#±0.5%, B: 0.0001-0.01%, N#±0.02%, and O#±0.008%, and at least one element selected from Zr: 0.01-0.5%, Nb: 0.01-0.5%, and V: 0.01-0.5%, with the balance being Fe and impurities, wherein an average grain diameter d μm at the center of the wall thickness of the tube is 1000 μm or smaller and satisfies the formula (d #±1500-2.5×10⁵ ×B), the thickness of an oxide layer on the outer surface of the tube is 15 μm or smaller. The tube of the present invention is excellent in weld crack resistance and capable of restraining the generation of cracks in a HAZ at the time of welding.

IPC 8 full level
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