FOXcore C-316L-T1

Flux cored wire, high-alloyed, austenitic stainless

Classifications

AWS A5.22/SFA-5.22

E316LT1-1

Characteristics and typical fields of application

FOXcore C-316L-T1 is a flux-cored wire designed for welding austenitic stainless steels of the 17Cr-12Ni-2.5Mo type or similar alloys, primarily using pure CO_2 shielding gas. It offers excellent usability, with a stable arc, low spatter levels, smooth bead appearance, and efficient slag removal. FOXcore C-316L-T1 is suitable for all-position welding and maintains consistent performance without requiring changes to welding parameters. WRC: 3-8FN.

Base materials

1.4401 X5CrNiMo17-12-2, 1.4404 X2CrNiMo17-12-2, 1.4409 GX2CrNiMo19-11-2, 1.4432 X2CrNiMo17-12-3, 1.4429 X2CrNiMoN17-12-3, 1.4435 X2CrNiMo18-14-3, 1.4436 X3CrNiMo17-12-3, 1.4571 X6CrNiMoTi17-12-2 , 1.4580 X6CrNiMoNb17-12-2, 1.4583 X10CrNiMoNb18-12 UNS S31600, S31603, S31635, S31640, S31653 AISI 316L, 316Ti, 316Cb

Typical analysis of all-weld metal (wt.-%)

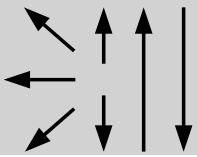
	Gas	C	Si	Mn	Cr	Ni	Mo
wt-%	C1	0.03	0.70	1.30	18.0	12.2	2.5

Mechanical properties of all-weld metal

Condition	Yield strength R_e	Tensile strength R_m	Elongation A (L_0=5d_0)	Impact work ISO-V KV J
	MPa	MPa	%	-120°C
u	**400** (≥320)	**560** (≥510)	**37** (≥30)	**60** (≥35)

u untreated, as welded – shielding gas C1 (100 % CO_2)

Operating data



Polarity:	Shielding gas:	ø (mm)
DC (+)	(EN ISO 14175)	1.2
	C1: 100 % CO_2	1.6

Welding with standard GMAW power source. No pulsing needed. Backhand (drag) technique preferred with a work angle of approximately 80º. Suitable gas flow rate is 15 – 20 l/min. Suggested heat input is max. 1.5 kJ/ mm, interpass temperature max. 150ºC and wire stick-out 15 – 20 mm.

Approvals

-

All information provided is based upon careful investigation and intensive research.
However, we do not assume any liability for correctness and information is subject to change without notice.