

Classifications

AWS A5.22/SFA-5.22

E308LT1-1

Characteristics and typical fields of application

FOXcore C-308L-T1 is a flux-cored wire developed for welding austenitic stainless steels of the 19Cr-10Ni type or similar alloys, primarily using pure CO₂ as the shielding gas. It is also suitable for welding titanium- and niobium-stabilized stainless steels such as ASTM 321 and ASTM 347, particularly in applications where the service temperature does not exceed 400°C. WRC: 3-8FN.

This filler metal offers excellent welding performance, characterized by a stable arc, minimal spatter generation, and smooth bead appearance. Slag removal is efficient, contributing to improved productivity and reduced post-weld cleaning time. FOXcore C-308L-T1 is designed for all-position welding and maintains consistent performance across various welding orientations without requiring changes to parameter settings.

Base materials

1.4301 X5CrNi18-10, 1.4306 X2CrNi19-11, 1.4307 X2CrNi18-9, 1.4311 X2CrNi18-9, 1.4312 GX10CrNi18-8, 1.4541 X6CrNiTi18-10, 1.4546 X5CrNiNb18-10, 1.4550 X6CrNiNb18-10 UNS S30400, S30403, S30453, S32100, S34700 AISI 304, 304L, 304LN, 302, 321, 347

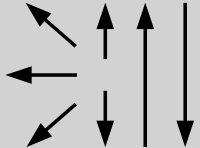
	Gas	C	Si	Mn	Cr	Ni
wt-%	C1	0.02	0.70	1.30	19.2	10.2

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	%	-196°C
u	390 (≥320)	560 (≥520)	39 (≥30)	40 (≥32)

u untreated, as welded – shielding gas C1 (100 % CO₂)

Operating data

	Polarity: DC (+)	Shielding gas: (EN ISO 14175) C1: 100 % CO ₂	ø (mm) 1.2 1.6
---	------------------------------	--	-----------------------------

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

Approvals

-