FOXcore C-309L-T1

Flux cored wire, high-alloyed, austenitic stainless, special applications

Classifications

AWS A5.22/SFA-5.22

E309LT1-1

Characteristics and typical fields of application

FOXcore C-309L-T1 is a high-alloy flux-cored wire containing 23% chromium and 13% nickel, primarily intended for surfacing applications on low-alloy steels and for dissimilar welds between mild steel and stainless steels. It is designed for use with pure CO_2 shielding gas.
This filler metal offers excellent usability, featuring a stable arc, reduced spatter, smooth bead appearance, and efficient slag removal. FOXcore C-309L-T1 is suitable for all-position welding and maintains consistent performance without requiring adjustments to welding parameters, making it a versatile solution for demanding fabrication tasks.

Base materials

Primarily used when surfacing unalloyed or low-alloy steels and when joining non-molybdenum alloyed stainless and carbon steels.

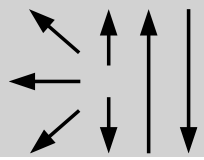
	Gas	C	Si	Mn	Cr	Ni
wt-%	C1	0.02	0.60	2.0	22.5	13.0

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	%	-20°C
u	**390** (≥270)	**550** (≥520)	**35** (≥30)	**50** (≥40)

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

Operating data



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

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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.