FOXcore F-309L-T1

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

Classifications

EN ISO 17633-B	AWS A5.22 / SFA-5.22
TS 309L-F C1/M21 1	E309LT1-1/4

Characteristics and typical fields of application

FOXcore F-309L-T1 is a high-alloy 23Cr 13Ni wire primarily intended for surfacing on low-alloy steels and for dissimilar welds between mild steel and stainless steels. It provides the excellent usability with stable arc, less spattering, good bead appearance, and better slag removal.
FOXcore F-309L-T1 is designed for all-round welding and can be used in all positions without changing parameter settings, designed mainly for pure CO2 shielding gas but it can be used also with mix gases Ar/CO2 (18-25%).

Base materials

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

Typical analysis

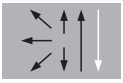
	C	Si	Mn	Cr	Ni
wt.-%	0.03	0.60	1.50	23.2	12.8

Mechanical properties of all-weld metal - typical values (min. values)

Condition	Yield strength $R_{p0.2}$	Tensile strength R_m	Elongation A (L_0=5d_0)	Impact energy ISO-V KV J
	Mpa	Mpa	%	-20°C
u	390 (≥320)	550 (≥520)	35 (≥30)	50

u untreated, as-welded – shielding gas M21 (Ar + 18% CO_2) / C1 (100% CO_2

Operating data



Polarity	DC +	Dimension mm
Shielding gas (EN ISO 14175)	C1 / M21	1.2
		1.6

Welding with standard GMAW power source. No pulsing needed. Backhand (drag) technique preferred with a work angle of approximately 80º. 100% CO2 as shielding gas offers the best weldability. 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

-CE

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.