

TOKO E309LT1-1

Approval:
ABS, BV, CCS,
DNV, LR, NK

Classifications:
AWS A5.22 E309LT1-1
EN T 23 12 LP C1
ISO 17633 B-TS309L-FC1

Flux Cored Wire For Stainless Steel

Characteristics and Applications:

ER309LT1-1 is a rutile flux cored tubular wire for all positional welding using pure CO₂ shielding gas. It performs with smooth arc transfer, low spatter level, fine ripple, fast freezing slag, easy control of weld pool and good hot crack resistance. AWS-309L is suitable for welding dissimilar metals such as ferritic and austenitic stainless steels, as well as for joining ferritic martensitic steels. It is also used for buffer layers of clad steels.

Welding Position :



Typical Chemical Composition of Weld Metal:

Alloy wt%	C	Mn	Si	Cr	Ni	Mo	P	S	Cu
AWS	0.04	0.5-2.5	1.0	22.0-25.0	12.0-14.0	0.5	0.04	0.03	0.5
ER309LT1-1	0.030	1.55	0.45	24.66	12.98	0.08	0.013	0.013	0.3

Typical Mechanical Properties of Weld Metal:

Mechanica properties	Yield Strength (Mpa)	Tensile Strength (Mpa)	Elongation%	Impact Value (J/°C)
AWS	—	520	30	—
ER309LT1-1	—	590	40	—

Notes on Usage:

1. Electric current : DC+
2. Clean up water, rust, oil on the base metal to avoid porosity and crack..
3. Shielding Gas : 100%CO₂ with gas flow rate of 20~25L/min and ESO of 15~20mm.
4. Proper protection on the welding place against wind is necessary during the outdoor welding.

Sizes Available and Recommended Parameters:

Dia/mm	F, H		V UP		OV	
	A	V	A	V	A	V
1.2	140-220	23-33	120-180	24-28	160-200	26-30
1.6	200-300	27-32	—	—	—	—