

SAIW 308LT1-1

GB/T 17853 E308LT1-1
AWS A5.22 E308TL1-1

Characteristics: SAIW 308LT1-1 is a low carbon austenitic stainless steel flux cored wire with a nominal composition of 19.5% Cr-10% Ni. The deposited structure is austenitic and contains a small amount of ferrite structure. The shielding gas uses 100% CO₂. It is suitable for all position welding. The wire has excellent welding performance, stable arc, low spatter, and beautiful bead shape and profile. The weld metal has low crack sensitivity and good resistance to intergranular corrosion.

Application: The product can be widely used in petrochemical, pressure vessels, food machinery, medical equipment, fertilizer equipment, textile machinery, nuclear reactors and so on. For example, welding of 06Cr18Ni10 (SUS 304/SUS 304L).

Chemical composition of deposited metal



Element (wt%)	C	Cr	Ni	Mn	Mo	Si	Cu	S	P
Standard value	0.04	18.0-21.0	9.0-11.0	0.5-2.5	0.5	1.0	0.5	0.03	0.04
Typical value	0.02	19.72	9.63	1.47	0.034	0.57	0.02	0.003	0.016
Ferrite	--			Equivalent value of pitting resistance			--		

Note: the content of Mo and CU is required ≤0.75% by AWS A5.22 and ≤0.5% by GB/T 17853.

Mechanical properties of deposited metal

Testing status	Testing temperature(°C)	Tensile strength(MPa)	Yield strength(MPa)	Elongation(%)
Standard value	room temperature	≥520	--	35
As-Welded condition	room temperature	570	--	40

Shielding gases, polarity and welding position

Gas composition	Power polarity	Welding position
100%CO ₂	 DCEP	

Recommended welding specifications

Wire diameter (mm)	Arc voltage (V)	Welding current (A)	Wire stick-out (mm)	Welding speed (cm/min)	Gas flow rate (L/min)
1.0	23-31	50-160	15-20	20-80	15-25
1.2	26-31	160-220	15-20	20-60	
1.6	26-33	200-300	15-20	20-60	