SAlW 347LT1-1

GB/T 17853 E317LT1-1
AWS A5.22 E347LT1-1

Characteristics: SAlW 347LT1-1 is a stainless steel flux-cored wire with a nominal composition of 19.5% Cr-10%Ni and a stabilizing element Nb (or Nb+Ta). The deposited structure is austenite and contains a small amount of ferrite structure. The shielding gas is 100% CO_2. The stabilizing element reduces the possibility of precipitation of intercrystalline chromium carbide precipitates, thereby improving the resistance to intergranular corrosion. It is suitable for all position welding, with excellent welding performance, stable arc, low spatter and beautiful bead shape and profile. It should be noted that the crack sensitivity of the weld may increase greatly due to the low ferrite or pure austenitic weld deposit metal produced by the dilution of the base metal.

Application : This wire can be widely used in food machinery, medical equipment, pressure vessels, petrochemicals, etc. such as the welding of 07Cr19Ni11Ti (SUS 321), 07Cr18Ni11Nb (SUS 347).

Chemical composition of deposited metal

Element (wt%)	C	Cr	Ni	Mn	Mo	Si	Cu	P	S	Nb+Ti
Standard value	0.04	18.0-21.0	9.0-11.0	0.5-2.5	0.5	1.0	0.5	0.04	0.03	8×C-1.0
Typical value	0.021	19.79	9.45	1.42	0.01	0.45	0.02	0.02	0.01	0.48
Ferrite		--			**Equivalent value of pittingresistance**			--		

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(℃)	Tensile strength(MPa)	Yield strength(MPa)	Elongation(%)
Standard value	room temperature	≥520	--	≧30
As-Welded condition	room temperature	590	--	40.6

Shielding gases, polarity and welding position

Gas composition	Power polarity	Welding position
100%CO_2		

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	