

SW-317L Cored

Type : Rutile

SW-317L Cored

Conformances

AWS A5.22 / ASME SFA5.22 E317LT1-1/-4

JIS Z3323 TS317L-FB1

Applications

- 316, 317 type stainless steels

Features

- Good performance in all positions

Welding Position



1G (PA) 2F (PB) 3G (PF) 4G (PE)

Current

DC +

Shielding Gas

100% CO₂

Ar + 20~25% CO₂

Typical Chemical Composition of All-Weld Metal (%)

	C	Si	Mn	P	S	Cr	Ni	Mo
100% CO ₂	0.03	0.65	1.40	0.02	0.01	18.8	12.3	3.3
80% Ar + 20% CO ₂	0.03	0.70	1.50	0.02	0.01	19.0	12.3	3.4

Typical Mechanical Properties of All-Weld Metal

	TS Mpa(lbs/in ²)	EL (%)	Temp °C(°F)	CVN-Impact Value J (ft-lbs)	Ferrite Number
100% CO ₂	550 (79,750)	40	-20 (4)	45 (33)	9-10
80% Ar + 20% CO ₂	570 (82,707)	41	-20 (4)	45 (33)	9-10

Typical Operating Procedures

Diameter, Polarity Shielding Gas	CTWD mm (in)	Wire Feed Speed m/min (in/min)	Voltage (volts)	Approx. Current (amps)	Deposition Rate kg/hr (lb/hr)
1.2mm (0.045 in) DC+					
100% CO ₂	20 (4/5)	6.0 (236)	23-26	140	2.5 (5.5)
		8.9 (350)	27-30	180	3.4 (7.5)
		12.0 (472)	28-31	210	4.5 (9.9)
80% Ar + 20% CO ₂	20 (4/5)	6.0 (236)	23-26	140	2.6 (5.7)
		9.0 (354)	27-30	180	3.5 (7.7)
		11.5 (453)	27-30	210	4.5 (9.9)
1.6mm (1/16 in) DC+					
100% CO ₂	25 (1)	3.8 (150)	24-27	180	3.1 (6.8)
		6.5 (256)	25-28	250	4.6 (10.1)
		8.9 (350)	26-29	290	6.0 (13.2)
80% Ar + 20% CO ₂	25 (1)	3.7 (146)	24-27	180	3.2 (7.1)
		6.4 (250)	25-28	250	4.8 (10.6)
		9.0 (354)	26-29	290	6.2 (13.7)

Diameter / Packaging

Diameter mm (in)	Spool			Pac		
	5kg (11lbs)	12.5kg (27.6lbs)	15kg (33lbs)	250kg (551lbs)	300kg (661lbs)	350kg (771lbs)
0.9 (0.035)	✓	✓	✓			
1.0 (0.040)	✓	✓	✓			
1.2 (0.045)	✓	✓	✓			
1.6 (1/16)		✓	✓			