

SW-309HBF

Type : Rutiles

Conformances

AWS A5.22/ ASME SFA5.22 E309HT1-1/-4

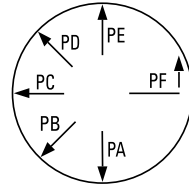
Applications

- Welding of dissimilar metals such as stainless steel and carbon steel or stainless steel and low alloy

Features

- Designed for welding with 100% CO₂ or Ar+15~25%CO₂ shielding gas
- Excellent all position weldability
- Smooth and stable arc with a fast freezing slag

Welding Position



Current

DC +

Shielding Gas

100% CO₂ / Ar+20~25% CO₂

Diameter / Packaging

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

Typical Chemical Composition of All-Weld Metal (%)

	C	Si	Mn	P	S	Cr	Ni	Nb
100% CO ₂	0.063	0.79	1.51	0.014	0.009	22.8	12.3	0.02
80% Ar + 20% CO ₂	0.060	0.78	1.49	0.015	0.008	22.7	12.2	0.02

Typical Mechanical Properties of All-Weld Metal

	TS MPa(lbs/in ²)	EL (%)	Temp °C(°F)	CVN-Impact Value J (ft.-lbs)
100% CO ₂	570 (82,650)	40.0	-60 (-76)	50 (39.9)
80% Ar + 20% CO ₂	574 (83,230)	42.6	-60 (-76)	54 (39.8)

Typical Welding Parameters

Diameter, Polarity Shielding Gas	CTWD mm (in)	Wire Feed Speed m/min (in/min)	Amp. (A)	Volt. (V)	Deposition Rate kg/hr (lb/hr)
1.2mm (0.045 in) DC+					
100% CO ₂	20 (4/5)	6.5 (256)	140	23-26	2.6 (5.7)
		9.2 (362)	180	27-30	3.7 (8.2)
		12.5 (492)	210	28-31	4.8 (10.6)
80% Ar + 20% CO ₂	20 (4/5)	6.2 (244)	140	23-26	2.7 (6.0)
		9.0 (354)	180	27-30	3.7 (8.2)
		12.0 (472)	210	27-30	4.9 (10.8)
1.6mm (1/16 in) DC+					
100% CO ₂	25 (1)	3.8 (150)	180	24-27	3.2 (7.1)
		6.5 (256)	250	25-28	4.5 (9.9)
		9.0 (354)	290	26-29	5.6 (12.3)
80% Ar + 20% CO ₂	25 (1)	3.7 (146)	180	24-27	3.3 (7.3)
		6.4 (252)	250	25-28	4.8 (10.6)
		8.9 (350)	290	26-29	5.9 (13.0)

SWAW

SAW

GMAW

GTAW

FCAW

Non-FERROUS

APPENDIX