

SW-2209 Cored

Type : Rutile

Conformances

AWS A5.22/ ASME SFA5.22 E2209T1-1/-4
 JIS Z3323 TS2209-FB1
 EN ISO 17633-A-T 22 9 3 N L M21/C1 2
 KR AWS A5.22 E2209T1-1
 ABS AWS A5.22 E2209T1-1(-46°C)
 LR S31803

BV UP (KV -20°C ≥41 J)
 DNV-GL Duplex Stainless Steel (M21)
 NK KW2209G(C)
 RS AF-8dup (M21)

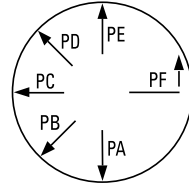
Applications

- Duplex stainless steel (NAS 329J3L, UNS S31803)

Features

- Good performance in all positions

Welding Position



Current

DC +

Shielding Gas

100% CO₂
 Ar + 20~25% CO₂

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)	√	√	√			
1.2 (0.045)	√	√	√			
1.6 (1/16)		√	√			

Typical Chemical Composition of All-Weld Metal (%)

	C	Si	Mn	P	S	Cr	Ni	Mo	N	PREN
100% CO ₂	0.03	0.60	0.7	0.022	0.006	23.0	8.7	3.3	0.13	36
80% Ar + 20% CO ₂	0.03	0.50	1.1	0.010	0.009	23.3	8.8	3.7	0.11	37.5

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	830 (120,350)	29.0	-20 (-4)	45 (33.2)
			-50 (-58)	35 (25.8)
80% Ar + 20% CO ₂	840 (121,800)	27.0	-20 (-4)	44 (32.4)
			-50 (-58)	35 (25.8)

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)
		9.8 (386)	180	27-30	3.8 (8.4)
		12.5 (492)	210	28-31	4.9 (10.8)
80% Ar + 20% CO ₂	20 (4/5)	6.5 (256)	140	23-26	2.8 (6.2)
		9.5 (374)	180	27-30	4.0 (8.8)
		12.0 (472)	210	27-30	5.0 (11.0)
1.6mm (1/16 in) DC+					
100% CO ₂	25 (1)	3.6 (142)	180	24-27	3.0 (6.6)
		6.5 (256)	250	25-28	4.5 (9.9)
		9.0 (354)	290	26-29	5.3 (11.7)
80% Ar + 20% CO ₂	25 (1)	3.5 (138)	180	24-27	3.2 (7.1)
		6.4 (252)	250	25-28	4.8 (10.6)
		8.9 (350)	290	26-29	5.5 (12.10)

SWAW

SAW

GMAW

GTAW

FCAW

Non-FERROUS

APPENDIX