SW-2594 Cored

Type : Rutile

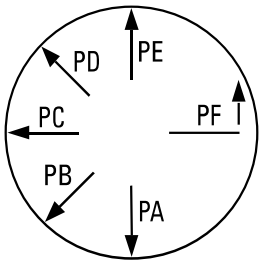
Conformances

AWS A5.22/ASME SFA 5.22 E2594T1-1/-4

Applications

- Welding of Super Duplex stainless steel(NAS 329J4L, UNS S32750)

Welding Position



Features

- Good porosity resistance
- Good performance in all positions

Current

DC +

Shielding Gas

100% CO_2

Ar+20% CO_2

Diameter / Packaging

Diameter Spool Pac						
mm (in)	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)	√	√	√			
1.4 (0.052)		√	√			
1.6 (1/16)		√	√			

Typical Chemical Composition of All-Weld Metal (%)

	C	Si	Mn	P	S	Cr	Ni	Mo	N	PREN
100% CO_2	0.023	0.42	0.74	0.018	0.002	25.5	9.15	3.74	0.24	41.8
80% Ar + 20% CO_2	0.031	0.52	0.75	0.012	0.001	25.7	9.11	3.78	0.23	41.9

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	896 (129,920)	24.2	-20 (-4)	27 (19.9)
80% Ar + 20% CO_2	891 (129,195)	26	-20 (-4)	37 (27.3)

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)	6.2 (244)	140	23~26	2.6 (5.7)
		9.0 (354)	180	27~30	3.8 (8.4)
		12.0 (472)	210	28~31	4.6 (10.1)
80% Ar + 20% CO_2	20 (4/5)	6.2 (244)	140	23~26	2.7 (5.9)
		9.0 (354)	180	27~30	3.7 (8.3)
		12.0 (472)	210	27~30	4.8 (10.6)
1.6mm (1/16 in) DC+					
100% CO_2	25 (1)	3.7 (146)	180	24~27	3.0 (6.6)
		6.4 (250)	250	25~28	4.5 (9.9)
		8.9 (350)	290	26~29	5.5 (12.1)
80% Ar + 20% CO_2	25 (1)	3.7 (146)	180	24~27	3.1 (6.8)
		6.4 (250)	250	25~28	4.6 (10.1)
		8.9 (350)	290	26~29	5.7 (12.6)