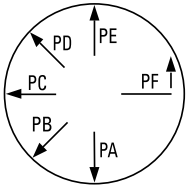
SC-91B9

Type : Rutile

Conformances

AWS A5.36/ ASME SFA5.36 E91T1-C1PZ-B91 H4
E91T1-M21PZ-B91 H4
(AWS A5.29/ ASME SFA5.29 E91T1-B9C/M H4)
EN ISO 17634-B-T 69T1-1M21/C1- 9C1MV

Welding Position



Applications

- Petrochemical industry
- Pressure vessel

Current

DC +

Features

- Good performance in all positions
- Good heat-resistance(P91 grade steel)

Shielding Gas

Ar + 20~25% CO_2

100% CO_2

Diameter / Packaging

Diameter	Spool			Pac		
mm (in)	5kg (11lbs)	12.5kg (27.6lbs)	15kg (33lbs)	100kg (221lbs)	200kg (441lbs)	250kg (551lbs)
1.2 (0.045)	√	√	√			
1.6 (1/16)		√	√			

Typical Chemical Composition of All-Weld Metal (%)

C	Si	Mn	Cr	Ni	Mo	V	Nb	N	HDM (ml/100g)
0.09	0.1	0.5	9.0	0.5	1.0	0.2	0.05	0.03	2.01

Typical Mechanical Properties of All-Weld Metal

YS MPa(lbs/in²)	TS MPa(lbs/in²)	EL (%)	Temp °C(°F)	CVN-Impact Value J (ft·lbs)	Condition
560 (81,300)	740 (107,400)	21	20 (68)	30 (22)	SR1: 2h/760°C

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)	Efficiency (%)
1.2mm (0.045 in) DC+						
100% CO_2	20~25 (51/64~1)	10.2 (400)	180~220	25~27	3.4 (7.5)	84~87
		11.5 (450)	230~270	27~29	4.5 (9.9)	85~88
		15.3 (600)	280~320	32~34	5.2 (11.4)	86~88
80% Ar + 20% CO_2	20~25 (51/64~1)	10.2 (400)	180~220	24~26	3.4 (7.5)	84~87
		11.5 (450)	230~270	26~28	4.5 (9.9)	85~88
		15.3 (600)	280~320	31~33	5.2 (11.4)	86~88
1.6mm (1/16 in) DC+						
100% CO_2	20~25 (51/64~1)	6.4 (250)	260~300	30~32	4.2 (9.2)	85~88
		7.6 (300)	310~350	32~34	4.8 (10.6)	86~88
		8.1 (320)	330~370	33~35	5.3 (11.7)	87~89
80% Ar + 20% CO_2	20~25 (51/64~1)	6.4 (250)	260~300	29~31	4.2 (9.2)	85~88
		7.6 (300)	310~350	31~33	4.8 (10.6)	86~88
		8.1 (320)	330~370	32~33	5.3 (11.7)	87~89