

SC-91

Type : Rutile

Conformances

AWS A5.36M/ ASME SFA5.36M E621T1-C1A0-G

(AWS A5.29/ ASME SFA5.29 E91T1-GC)

JIS Z3313 T57 2 T1-1 C A-N1 H10

EN ISO 17632-A-T 50 2 1Ni P C 1

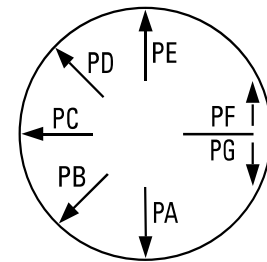
Applications

- Structural fabrication
- Steel industry

Features

- Smooth and stable arc with a fast freezing slag
- Pre-heat recommended to avoid cold crack
- High-tensile steel (HSB 600)

Welding Position



Current

DC +

Shielding Gas

100% CO₂

Diameter / Packaging

Diameter mm (in)	Spool			Pac		
	5kg (11lbs)	15kg (33lbs)	20kg (44lbs)	100kg (221lbs)	200kg (441lbs)	250kg (551lbs)
1.2 (0.045)	✓	✓	✓			
1.4 (0.052)	✓	✓	✓			
1.6 (1/16)	✓	✓	✓			

Typical Chemical Composition of All-Weld Metal (%)

C	Si	Mn	P	S	Ni
0.06	0.55	1.20	0.013	0.013	0.85

Typical Mechanical Properties of All-Weld Metal

YS MPa(lbs/in ²)	TS MPa(lbs/in ²)	EL (%)	Temp °C(°F)	CVN-Impact Value J (ft-lbs)
645 (93,600)	660 (95,800)	24.0	0 (32) -20 (-4)	100 (74) 70 (52)

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+									
All Position									
100% CO ₂	25 (1)	4.4 (175)	110~140	23~28	1.6 (3.5)	86~88			
		5.1 (200)	120~150	24~29	1.8 (4.0)				
		6.4 (250)	130~160	25~30	2.3 (5.0)				
		7.6 (300)	160~190	25~30	2.7 (6.0)				
		8.9 (350)	170~200	26~31	3.2 (7.0)				
		9.5 (375)	190~220	26~31	3.4 (7.5)				
		10.8 (425)	210~240	27~32	3.8 (8.5)				
		Flat & Horizontal							
		12.1 (475)	230~260	28~33	4.9 (10.8)				
		12.7 (500)	240~270	29~34	5.2 (11.4)				
1.4mm (0.052 in) DC+									
All Position									
100% CO ₂	25 (1)	3.8 (150)	120~150	23~28	1.8 (3.9)	86~88			
		4.7 (180)	130~160	24~29	2.2 (4.8)				
		5.7 (225)	160~190	24~29	2.7 (5.9)				
		6.4 (250)	180~210	25~30	2.9 (6.5)				
		6.9 (275)	200~230	25~30	3.2 (7.2)				
		7.6 (300)	220~250	26~31	3.5 (7.8)				
		Flat & Horizontal							
				8.5 (335)	240~270		26~31	4.0 (8.7)	
		9.5 (375)	260~290	27~32	4.4 (9.8)				
		10.2 (400)	280~310	27~34	4.7 (10.4)				
1.6mm (1/16 in) DC+									
All Position									
100% CO ₂	25 (1)	3.8 (150)	170~200	24~29	2.5 (5.5)	86~88			
		4.4 (175)	180~210	24~30	2.9 (6.4)				
		5.1 (200)	200~230	25~30	3.3 (7.3)				
		5.7 (225)	230~260	25~31	3.7 (8.2)				
		6.4 (250)	250~280	26~31	4.2 (9.2)				
		6.9 (275)	270~300	26~32	4.6 (10.1)				
		Flat & Horizontal							
				8.3 (325)	300~330		27~32	5.4 (11.9)	
		8.9 (350)	330~360	28~34	5.8 (12.8)				