

SC-91LT

Type : Rutile

Conformances

AWS A5.36/ ASME SFA5.36 E91T1-C1A8-Ni2
 (AWS A5.29/ ASME SFA5.29 E91T1-Ni2C-J)
 JIS Z3313 T59 6 T1-1 C A-N5 H5
 EN ISO 17632-A-T 50 6 Z P C 1 2 H5
 ABS 5YQ500SA H5

LR 5Y50S H5
 DNV-GL VY50MS (H5)
 CWB E621T1-Ni2C-J H4
 (E91T1-Ni2C-J H4)
 RS 5Y50SM H5

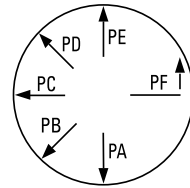
Applications

- Shipbuilding
- Offshore structure
- Structural fabrication

Features

- Good impact value at low temperature

Welding Position



Current

DC +

Shielding Gas

100% CO₂

Diameter / Packaging

Diameter	Spool			Pac		
	12.5kg (28lbs)	15kg (33lbs)	20kg (44lbs)	100kg (221lbs)	200kg (441lbs)	250kg (551lbs)
1.2 (0.045)	✓					
1.4 (0.052)	✓					

Typical Chemical Composition of All-Weld Metal (%)

C	Si	Mn	P	S	Ni
0.04	0.25	1.25	0.010	0.010	2.30

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)
644 (93,380)	676 (98,020)	22.8	-60 (-80)	80 (59)

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	25 (1)	All Position				86-88
		4.4 (175)	110-140	23-28	1.6 (3.5)	
		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)	170-210	26-31	3.2 (7.0)	
		9.5 (375)	190-230	26-31	3.4 (7.5)	
		10.8 (425)	220-250	27-32	3.8 (8.5)	
		Flat & Horizontal				
		12.1 (475)	240-270	28-33	4.9 (10.8)	
		12.7 (500)	250-280	29-34	5.2 (11.4)	
		1.4mm (0.052 in) DC+				
100% CO ₂	25 (1)	All Position				86-88
		3.8 (150)	120-150	23-28	1.8 (3.9)	
		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)	190-220	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)			