

SC-71SR

Type : Rutile



Conformances

AWS A5.36/ ASME SFA5.36 E71T1-C1A6-CS2 H4
 E71T1-C1P6-CS2 H4
 (AWS A5.20/ ASME SFA5.20 E71T-1C/-9C-J/12C-J H4)
 JIS Z3313 T49 4 T1-1 C AP H5
 EN ISO 17632-A-T 42 4 P C1 1 H5
 ABS 4Y400SA H5
 LR 4Y40S H5

BV SA4Y40 HHH
 DNV-GL IVY40MSH5
 CWB CSA W48 E491T-12J-H4
 (-45 Degree)
 CCS 4Y40S H5
 CE

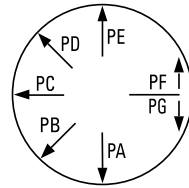
Applications

- Pipe line
- Offshore structure
- Pressure vessel

Features

- Good impact value at low temperature (As Welded and PHWT)

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
0.05	0.40	1.20	0.011	0.010	0.38

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)	
560 (81,300)	580 (84,200)	28.0	-45 (-49) -50 (-58)	80 (59) 65 (48)	As Welded
540 (78,400)	560 (81,300)	30.0	-45 (-49) -50 (-58)	60 (44) 45 (33)	PWHT (620 @2hr)

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)	100~130	20~25	1.6 (3.5)					
		5.7 (225)	120~150	21~26	2.0 (4.5)					
		7.0 (275)	130~160	22~27	2.5 (5.5)					
		8.3 (325)	160~190	23~28	2.9 (6.5)					
		8.9 (350)	170~200	24~29	3.2 (7.0)					
		10.2 (400)	200~230	25~30	3.6 (8.0)					
		Flat & Horizontal								
		11.4 (450)	210~240	26~31	4.1 (9.1)					
		12.1 (475)	230~260	27~32	4.3 (9.5)					
		13.3 (525)	250~280	28~33	4.7 (10.4)					
		1.4mm (0.052 in) DC+								
		100% CO ₂	25 (1)	All Position					86-88	
				3.8 (150)	130~160	22~27		1.8 (3.9)		
5.1 (200)	140~170			23~28	2.4 (5.2)					
6.4 (250)	160~190			24~29	2.9 (6.5)					
7.6 (300)	180~210			26~31	3.5 (7.8)					
8.9 (350)	200~230			27~32	4.1 (9.1)					
9.5 (375)	220~250			28~33	4.4 (9.8)					
Flat & Horizontal										
10.8 (425)	240~270			30~35	5.0 (11.1)					
12.1 (475)	260~290			31~36	5.6 (12.4)					
12.7 (500)	310~340			32~37	5.9 (13.0)					

SMW

SAW

GMAW

GTAW

FCAW

Non-FERROUS

APPENDIX