SC-71HJ

Type : Rutile

Conformances

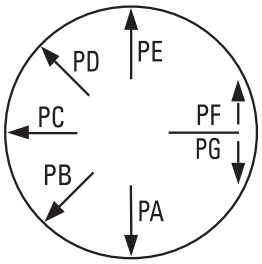
AWS A5.36/ ASME SFA5.36 E71T1-C1A4-CS1
(AWS A5.20/ ASME SFA5.20 E71T-1C/-9C/-9C-J)
JIS Z3313 T49 4 T1-1 C A
EN ISO 17632-A-T 42 4 P C1 1 H10
KR 4Y40SG(C1) H10
ABS 4Y400SA H10

LR 4Y40S H10
BV SA4Y40 HH
DNV·GL IVY40MS H10
NK KSW54Y40G(C) H10

Applications

- Shipbuilding
- Offshore Structure
- Structural fabrication
- Pressure vessels

Welding Position



Features

- Designed for welding with 100% CO_2 shielding gas
- Good bead appearance
- Smooth and stable arc with a fast freezing slag
- Good performance in all position

Current

DC +

Shielding Gas

100% CO_2

Diameter / Packaging

Diameter	Spool			Pac		
mm (in)	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
0.04	0.45	1.30	0.008	0.011	0.40

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)
560 (81,300)	580 (84,200)	27.5	-40 (-40)	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				
		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)	
100% CO_2	25 (1)	8.9 (350)	170~200	24~29	3.2 (7.0)	85~88
		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+						
		All Position				
		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)	
100% CO_2	25 (1)	8.9 (350)	200~230	27~32	4.1 (9.1)	86~88
		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)	
1.6mm (1/16 in) DC+						
		All Position				
		3.8 (150)	180~210	21~27	2.5 (5.5)	
		4.4 (175)	220~250	23~28	2.9 (6.4)	
		5.1 (200)	260~290	24~29	3.3 (7.3)	
		5.7 (225)	280~300	25~31	3.7 (8.2)	
100% CO_2	25 (1)	6.4 (250)	300~330	27~34	4.2 (9.2)	86~88
		7.6 (300)	330~360	29~36	5.0 (11.0)	
		Flat & Horizontal				
		8.3 (325)	360~390	31~38	5.4 (11.9)	
		8.9 (350)	390~420	32~39	5.8 (12.8)	
		11.4 (450)	420~450	34~39	7.5 (16.5)	