

SC-71MJ

Type : Rutile

Conformances

AWS A5.36/ ASME SFA5.36 E71T1-M21A4-CS1

(AWS A5.20/ ASME SFA5.20 E71T-9M-J)

JIS Z3313 T49 4 T1-1 M A-U H5

EN ISO 17632-A-T 46 4 P M21 1 H5

ABS 4YSA, 4Y400SA H5

LR 4Y40S H5

BV SA4Y, SA4Y40 HHH

DNV-GL IVY40MS (H5)

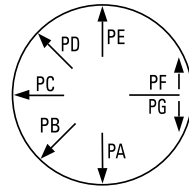
Applications

- Shipbuilding
- Pipe line
- Offshore structure

Features

- Good impact value at low temperature
- Smooth and stable arc with a fast freezing slag
- Low hydrogen level(H5)
- Designed for welding with Ar-CO₂ mixture

Welding Position



Current

DC +

Shielding Gas

Ar + 20~25% CO₂

Diameter / Packaging

Diameter	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	0.30	1.10	0.012	0.011	0.42

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)
545 (79,100)	583 (84,500)	25.0	-30 (-22) -40 (-40)	126 (93) 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+							
80% Ar + 20% CO ₂	25 (1)	All Position					86-88
		4.4 (175)	110-140	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	22-27	2.9 (6.5)		
		8.9 (350)	170-200	23-28	3.2 (7.0)		
		10.2 (400)	200-230	24-29	3.6 (8.0)		
		Flat & Horizontal					
		11.4 (450)	210-240	25-31	4.1 (9.1)		
		12.1 (475)	230-260	26-32	4.3 (9.5)		
13.3 (525)	250-280	27-33	4.7 (10.4)				
1.4mm (0.052 in) DC+							
80% Ar + 20% CO ₂	25 (1)	All Position					86-88
		3.8 (150)	120-150	22-27	1.8 (3.9)		
		4.4 (175)	130-160	21-26	2.1 (4.6)		
		5.1 (200)	160-190	22-27	2.4 (5.2)		
		5.7 (225)	180-210	23-28	2.7 (5.9)		
		6.4 (250)	200-230	24-29	2.9 (6.5)		
		7.6 (300)	220-250	25-30	3.5 (7.8)		
		Flat & Horizontal					
		8.9 (350)	260-290	28-32	4.1 (9.1)		
		11.4 (450)	310-330	29-34	5.3 (11.7)		
1.6mm (1/16 in) DC+							
80% Ar + 20% CO ₂	25 (1)	All Position					86-88
		3.8 (150)	170-200	21-26	2.5 (5.5)		
		4.4 (175)	180-210	22-27	2.9 (6.4)		
		5.1 (200)	200-230	22-28	3.3 (7.3)		
		5.7 (225)	230-260	24-29	3.7 (8.2)		
		6.4 (250)	250-280	25-30	4.2 (9.2)		
		7.6 (300)	280-310	26-31	5.0 (11.0)		
		Flat & Horizontal					
		8.3 (325)	300-330	27-32	5.4 (11.9)		
		8.9 (350)	330-360	28-33	5.8 (12.8)		
10.2 (450)	380-410	29-34	6.6 (14.6)				

SMAW
 SAW
 GMAW
 GTAW
 FCAW
 Non-FERROUS
 APPENDIX