

# 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)

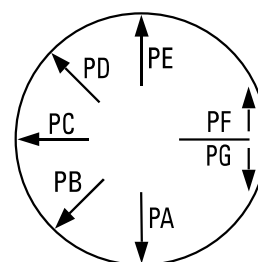
## Applications

- 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-CO<sub>2</sub> mixture

## Welding Position



## Current

DC +

## Shielding Gas

Ar + 20~25% CO<sub>2</sub>

## 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	0.30	1.10	0.012	0.011	0.42

**Typical Mechanical Properties of All-Weld Metal**

YS MPa(lbs/in <sup>2</sup> )	TS MPa(lbs/in <sup>2</sup> )	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 (%)	
<b>1.2mm (0.045 in) DC+</b>							
<b>All Position</b>							
80% Ar + 20% CO <sub>2</sub>	25 (1)	4.4 (175)	110~140	20~25	1.6 (3.5)	86~88	
		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)		
		<b>Flat &amp; Horizontal</b>					
		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)		
<b>1.4mm (0.052 in) DC+</b>							
<b>All Position</b>							
80% Ar + 20% CO <sub>2</sub>	25 (1)	3.8 (150)	120~150	22~27	1.8 (3.9)	86~88	
		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)		
		<b>Flat &amp; Horizontal</b>					
		8.9 (350)	260~290	28~32	4.1 (9.1)		
		11.4 (450)	310~330	29~34	5.3 (11.7)		
		<b>1.6mm (1/16 in) DC+</b>					
<b>All Position</b>							
80% Ar + 20% CO <sub>2</sub>	25 (1)	3.8 (150)	170~200	21~26	2.5 (5.5)	86~88	
		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)		
		<b>Flat &amp; Horizontal</b>					
		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)		