

# SC-71LHM Cored

Type : Rutile



## Conformances

AWS A5.20/ ASME JFA A5.20 E71T-1M/-9M

JIS Z3313 T49 3 T1-1 M A-U H5

EN ISO 17632-A-T 46 3 P M 1 H5

ABS 3YSA H5

CWB CSA W48 E49 1T-9M-H4

LR 3YS H5

BV SA3Y HHH

DNV IIIYMSH5

GL 3YH5S

TÜV EN ISO 17632-A-T 46 3 P M 1 H5

DB EN ISO 17632-A-T 46 3 P M 1 H5

CE

## Applications

- Shipbuilding
- Steel industry
- General fabrication

## Features

- Designed for welding with 75~80% Argon/ balance CO<sub>2</sub> shielding gas
- Good arc performance and fast freezing slag
- Low hydrogen level(H5) and good crack resistance

## Welding Position



1G 2F 3G 4G  
(PA) (PB) (PF-PG) (PE)

## Current

DC +

## Shielding Gas

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

## 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
0.05	0.50	1.20	0.012	0.015

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)
580 (84,200)	600 (87,100)	28.0	-30 (-22)	80 (59)

Typical Operating Procedures

Diameter, Polarity Shielding Gas	CTWD mm (in)	Wire Feed Speed m/min (in/min)	Voltage (volts)	Approx. Current (amps)	Deposition Rate kg/hr (lb/hr)	Efficiency (%)
<b>1.2mm (0.045 in) DC+</b>						
80% Ar + 20% CO <sub>2</sub>	25 (1)	4.5 (175)	17~22	120~160	1.5 (3.3)	86~88
		6.4 (250)	18~24	135~175	2.2 (4.8)	
		7.6 (300)	19~25	150~180	2.5 (5.5)	
		8.9 (350)	22~27	175~205	3.0 (6.6)	
		10.2 (400)	24~29	185~220	3.5 (7.6)	
		11.5 (450)	25~30	220~260	3.8 (8.4)	
		12.8 (500)	26~31	250~290	4.4 (9.6)	
		15.3 (600)	27~32	280~320	5.3 (11.6)	
<b>1.4mm (0.052 in) DC+</b>						
80% Ar + 20% CO <sub>2</sub>	25 (1)	3.8 (150)	19~24	130~170	1.9 (4.1)	86~88
		5.1 (200)	20~25	160~200	2.5 (5.5)	
		6.4 (250)	21~27	180~230	3.0 (6.6)	
		7.6 (300)	22~28	220~260	4.2 (9.2)	
		10.2 (400)	26~31	270~320	5.5 (12.1)	
		12.8 (500)	27~33	300~350	6.0 (13.2)	
<b>1.6mm (1/16 in) DC+</b>						
80% Ar + 20% CO <sub>2</sub>	25 (1)	3.2 (125)	21~24	170~210	2.0 (4.4)	86~88
		3.8 (150)	22~25	180~220	2.5 (5.5)	
		5.1 (200)	24~28	220~260	3.2 (7.0)	
		6.4 (250)	25~31	270~320	4.0 (8.8)	
		7.6 (300)	27~33	300~350	5.0 (11.0)	
		10.2 (400)	33~37	350~400	6.4 (14.0)	

SMWV

SAW

GMWV

GTAW

FCWV

Non-FERROUS

APPENDIX