

# SC-70H Cored

Type : Semi-Metal

## Conformances

AWS A5.36/ ASME SFA5.36 E70T1-C1A2-CS1

(AWS A5.20/ ASME SFA5.20 E70T-9C)

JIS Z3313 T49 3 T1-0 C A H10

EN ISO 17632-A-T 42 2 R C1 3

ABS 3YSA H10

LR 3YS H10

DNV-GL IIIYMS(H10)

CCS 3YSM H10

CWB CSA W48 E492T-9-H8

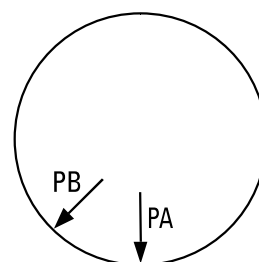
## Applications

- Shipbuilding
- Structural fabrication
- Machinery
- Heavy equipment
- Transportation equipment

## Features

- High deposition in the flat and horizontal positions
- Designed for welding with 100% CO<sub>2</sub> shielding gas
- Low spatter and soft arc
- Good anti-porosity

## Welding Position



## Current

DC +

## Shielding Gas

100% CO<sub>2</sub>

## Diameter / Packaging

Diameter mm (in)	Spool			Pac		
	5kg (11lbs)	15kg (33lbs)	25kg (44lbs)	100kg (220lbs)	250kg (551lbs)	300kg (661lbs)
1.2 (0.045)		✓		✓	✓	✓
1.4 (0.052)		✓		✓	✓	✓
1.6 (1/16)		✓		✓	✓	✓
2.0 (5/64)			✓	✓		
2.4 (3/32)			✓	✓		
3.2 (1/8)			✓	✓		

Typical Chemical Composition of All-Weld Metal (%)

C	Si	Mn	P	S
0.05	0.56	1.48	0.014	0.010

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)
495 (71,900)	580 (84,100)	28	-30 (-22)	51 (38)

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>						
100% CO <sub>2</sub>	25 (1)	10.2 (400)	220~240	24~28	4.7 (10.4)	89~91
		12.8 (500)	230~270	28~32	5.6 (12.3)	89~91
		15.3 (600)	280~320	30~34	6.3 (13.9)	90~92
<b>1.4mm (0.052 in) DC+</b>						
100% CO <sub>2</sub>	25 (1)	12.2 (480)	280~320	30~34	5.7 (12.6)	89~91
		12.7 (500)	310~330	30~34	5.9 (13.0)	89~91
		13.0 (512)	330~370	34~38	6.3 (13.9)	90~92
<b>1.6mm (1/16 in) DC+</b>						
100% CO <sub>2</sub>	25 (1)	7.7 (300)	280~320	30~34	5.1 (11.2)	89~91
		8.8 (350)	330~370	32~38	5.9 (13.0)	89~91
		10.3 (400)	380~420	34~40	6.6 (14.6)	90~92
<b>2.0mm (5/64 in) DC+</b>						
100% CO <sub>2</sub>	25 (1)	6.4 (250)	330~370	31~35	6.0 (13.2)	89~91
		7.7 (300)	380~420	32~36	7.1 (15.6)	92~93
		10.0 (390)	430~470	34~38	9.8 (21.6)	92~93
<b>2.4mm (3/32 in) DC+</b>						
100% CO <sub>2</sub>	25 (1)	4.5 (180)	380~420	31~35	6.4 (14.1)	89~91
		5.2 (200)	430~470	32~36	7.6 (16.8)	92~93
		6.4 (250)	480~520	34~38	9.6 (21.2)	92~93
<b>3.2mm (1/8 in) DC+</b>						
100% CO <sub>2</sub>	25 (1)	2.5 (98)	360~400	30~34	6.6 (14.6)	89~91
		2.8 (110)	380~420	30~34	7.2 (15.9)	92~93
		3.3 (130)	460~500	32~36	10.3 (22.7)	92~93