

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

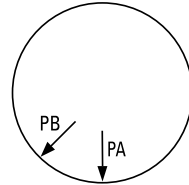
Applications

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

Features

- High deposition in the flat and horizontal positions
- Designed for welding with 100% CO₂ shielding gas
- Low spatter and soft arc
- Good anti-porosity

Welding Position



Current

DC +

Shielding Gas

100% CO₂

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 ²)	TS MPa(lbs/in ²)	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 (%)
1.2mm (0.045 in) DC+						
100% CO ₂	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
1.4mm (0.052 in) DC+						
100% CO ₂	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
1.6mm (1/16 in) DC+						
100% CO ₂	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
2.0mm (5/64 in) DC+						
100% CO ₂	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
2.4mm (3/32 in) DC+						
100% CO ₂	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
3.2mm (1/8 in) DC+						
100% CO ₂	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

SWAW

SAW

GMAW

GTAW

FCAW

Non-FERROUS

APPENDIX