

SC-70T Cored

Type : Metal-Cored



Conformances

AWS A5.36/ ASME SFA5.36 E70T15-C1A0-CS1
E70T15-M21A2-CS1

(AWS A5.18/ ASME SFA5.18 E70C-3C/6M)

JIS Z3313 T 49 2 T15-1 CA
Z3313 T 49 3 T15-1 MA

EN ISO 17632-A-T 42 2 M C1 1

EN ISO 17632-A-T 46 2 M M21 1 H5

ABS 3YSA H10, 3YSA (C)

LR 3YS H10 (C1), 3YS H5 (M21)

BV SA3YMHH (C1), SA3YHHH (M21)

DNV-GL IIYMS H10 (C1), IIYMS H5 (M21)

TÜV EN ISO 17632-A T46 2 M M / T42 2 M C

DB EN ISO 17632-A T46 2 M21 M1 / T42 2 M C1 1

CWB CSA W48 E491C-3-H4

E491C-6MJ-H8

CE

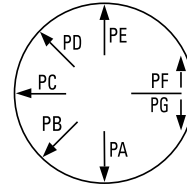
Applications

- Shipbuilding
- Machinery
- Structural fabrication

Features

- Good weldability in thin plate and root pass welding
- High productivity and automatic applications
- Minimum amount of slag & spatter
- Use 100% CO₂ gas or Ar-CO₂ mixture (Dual gas)
- All position welding
- Good anti-porosity

Welding Position



Current

DC +

Shielding Gas

100% CO₂

Ar + 20~25% CO₂

Diameter / Packaging

Diameter mm (in)	Spool			Pac		
	5kg (11lbs)	15kg (33 lbs)	20kg (44lbs)	250kg (551lbs)	300kg (661lbs)	350kg (771lbs)
1.0 (0.040)	√	√	√	√	√	√
1.2 (0.045)	√	√	√	√	√	√

Typical Chemical Composition of All-Weld Metal (%)

	C	Si	Mn	P	S
100% CO ₂	0.06	0.60	1.20	0.011	0.014
80% Ar + 20% CO ₂	0.07	0.65	1.45	0.010	0.011

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)
100% CO ₂	473 (68,600)	551 (79,900)	29	-20 (-4)	69 (51)
80% Ar + 20% CO ₂	552 (80,100)	598 (86,800)	27	-30 (-22)	65 (48)

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	19-25 (3/4-1)	2.4 (90)	80	17	0.8 (1.8)	90-92
		4.8 (190)	160	23	2.8 (6.2)	91-93
		9.8 (390)	250	28	4.0 (8.8)	92-94
		12.7 (500)	300	32	5.4 (11.9)	93-95
80% Ar + 20% CO ₂	19-25 (3/4-1)	7.4 (290)	200	24	2.7 (5.9)	92-94
		9.8 (390)	250	28	4.2 (9.2)	93-95
		12.7 (500)	300	30	5.7 (12.5)	95-97

SMW

SAW

GMW

GTAW

FCAW

Non-FERROUS

APPENDIX