

# SC-70A

Type : Metal-Cored



## Conformances

AWS A5.36/ ASME SFA5.36 E70T15-C1A0-CS1  
 E70T15-M21A2-CS1  
 (AWS A5.18 / ASME SFA5.18 E70C-3C  
 E70C-6M)  
 EN ISO 17632-A-T 42 2 M C1 1 H5  
 EN ISO 17632-A-T 46 2 M M21 1 H5  
 ABS 3YSA H5  
 LR 3YS H5  
 BV SA3Y H5  
 DNV IIIYS H5

RINA 3YS H5  
 TÜV EN ISO 17632-A - T 42 2 M C 1 H5  
 / T 46 2 M M 1 H5  
 DB EN ISO 17632-A - T 42 2 M C 1 H5  
 / T 46 2 M M 1 H5  
 CWB CSA W48-06 E491C-6M-H8  
 CE

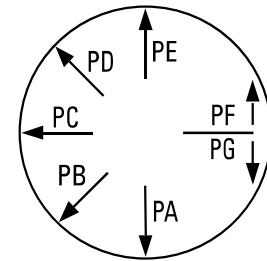
## Applications

- Shipbuilding, bridge construction machinery, and vehicles.

## Features

- Designed for welding with 100% CO<sub>2</sub> shielding gas
- Excellent weld-ability and low spatter
- Exceptionally smooth and stable arc with a fast freezing slag system

## Welding Position



## Current

DC +

## Shielding Gas

Ar + 20~25% CO<sub>2</sub>  
 100% CO<sub>2</sub>

## Diameter / Packaging

Diameter mm (in)	Spool			Pac		
	5kg (11lbs)	15kg (33lbs)	20kg (44lbs)	200kg (441bs)	250kg (551lbs)	300kg (661lbs)
1.2 (0.045)	√	√	√	√	√	√
1.4 (0.052)		√	√	√	√	√
1.6 (1/16)		√	√	√	√	√

**Typical Chemical Composition of All-Weld Metal (%)**

	C	Si	Mn	P	S
100% CO <sub>2</sub>	0.06	0.50	1.20	0.011	0.006
80% Ar + 20% CO <sub>2</sub>	0.07	0.58	1.43	0.011	0.007

**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)
100% CO <sub>2</sub>	446 (64,742)	530 (76,935)	30	-20 (-4)	50 (37)
80% Ar + 20% CO <sub>2</sub>	492 (71,419)	580 (84,193)	26	-30 (-22)	57 (42)

**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 <sub>2</sub>	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 <sub>2</sub>	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