

# SF-70MX

Type : Semi-Metal



## Conformances

AWS A5.36/ ASME SFA5.36 E70T1-C1A0-CS1  
 (AWS A5.20/ ASME SFA5.20 E70T-1C)  
 JIS Z3313 T49 J 0 T1-0 C A-U H10  
 EN ISO 17632-A-T 42 0 R C1 3  
 KR 2SG, 2YSG (C1) H10, 2MG, 2YMG(C1) H10  
 ABS 2SA, 2YSAH10, 2Y400SA  
 LR 2S, 2YS H10  
 BV SA2YM HH  
 DNV-GL I1Y40MS H10

NK KSW2G, KSW52Y40G(C) H10  
 KAW2MG, KAW52MG(C) H10  
 CCS 2YSM H10  
 CRS 2HSM, 2YHSM  
 RINA 2YS H10  
 CWB CSA W48 E492T-1-H8  
 CE

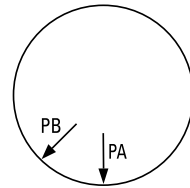
## Applications

- Shipbuilding
- Structural fabrication
- General fabrication
- Transportation equipment

## Features

- Designed for welding with 100% CO<sub>2</sub> shielding gas
- Good high deposition rate
- Good penetration and good arc stability
- 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 (55lbs)	100kg (220lbs)	250kg (551lbs)	300kg (661lbs)
1.2 (0.045)	√	√		√	√	√
1.4 (0.052)	√	√		√	√	√
1.6 (1/16)	√	√		√	√	√
2.4 (3/32)			√	√	√	

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

C	Si	Mn	P	S
0.05	0.5	1.5	0.011	0.013

## 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)
560 (81,300)	590 (85,700)	28	-20 (-4)	50(37)

## 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)	11.5 (450)	200-240	24-28	4.1 (9.0)	85-87
		12.6 (500)	220-260	27-29	4.5 (10.0)	87-89
		14.3 (560)	240-280	29-33	5.0 (10.9)	87-89
		15.4 (610)	260-300	29-33	5.4 (11.9)	89-90
<b>1.4mm (0.052 in) DC+</b>						
100% CO <sub>2</sub>	25 (1)	9.6 (380)	230-270	24-28	4.4 (9.8)	87-89
		10.7 (420)	250-290	25-29	5.0 (11.1)	87-89
		12.2 (480)	270-310	29-33	5.6 (12.4)	88-90
		12.8 (500)	300-340	30-34	5.9 (13.0)	88-90
		13.1 (515)	330-370	30-34	6.1 (13.4)	88-90
<b>1.6mm (1/16 in) DC+</b>						
100% CO <sub>2</sub>	25 (1)	6.4 (250)	250-290	26-30	3.8 (8.5)	86-88
		7.6 (300)	270-310	28-32	4.5 (10.0)	87-89
		8.9 (350)	300-340	30-34	5.5 (12.1)	87-89
		10.2 (400)	340-380	33-37	6.3 (13.9)	89-91
<b>2.4mm (3/32 in) DC+</b>						
100% CO <sub>2</sub>	25 (1)	3.2 (125)	335	23-28	4.9 (10.8)	86-88
		5.1 (200)	445	27-32	7.6 (16.7)	88-89
		6.4 (250)	500	29-34	9.6 (21.3)	89-92
		7.6 (300)	590	31-36	11.8 (26.0)	89-92