

# SC-80M

Type : Metal-Cored

## Conformances

AWS A5.36/ ASME SFA5.36 E80T15-M21A4-G

(AWS A5.28/ ASME SFA5.28 E80C-G)

EN ISO 17632-A-T 46 4 M M21 3 H5

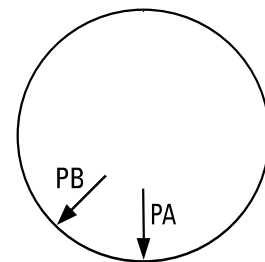
## Applications

- Bridge construction
- Structural fabrication
- Robotic welding
- Transportation equipment

## Features

- High strength weathering grade steels(Corten steel)
- Good anti-porosity

## Welding Position



## Current

DC +

## Shielding Gas

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

## Diameter / Packaging

Diameter mm (in)	Spool			Pac		
	5kg (11lbs)	15kg (33lbs)	20kg (44lbs)	250kg (551lbs)	300kg (661lbs)	350kg (771lbs)
1.2 (0.045)	√	√	√	√	√	√
1.4 (0.052)	√	√	√	√	√	√
1.6 (1/16)	√	√	√	√	√	√

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

C	Si	Mn	P	S	Cr	Ni	Cu
0.07	0.63	1.65	0.014	0.007	0.25	0.72	0.34

**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)
610 (88,400)	664 (96,300)	24	-40 (-40)	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>						
<b>Flat &amp; Horizontal</b>						
80% Ar + 20% CO <sub>2</sub>	19-25 (3/4-1)	7.8 (307)	240~260	22~26	3.5 (7.5)	90~96
		9.4 (374)	270~290	22~27	4.0 (9.2)	
		10.3 (405)	300~320	23~27	4.5 (10.8)	
<b>1.4mm (0.052 in) DC+</b>						
<b>Flat &amp; Horizontal</b>						
80% Ar + 20% CO <sub>2</sub>	19-25 (3/4-1)	7.2 (283)	280~300	24~28	4.1 (8.9)	94~98
		7.7 (303)	310~330	26~29	4.9 (10.8)	
		10.9 (410)	350~370	27~30	6.6 (14.2)	
<b>1.6mm (1/16 in) DC+</b>						
<b>Flat &amp; Horizontal</b>						
80% Ar + 20% CO <sub>2</sub>	19-25 (3/4-1)	7.3 (287)	340~360	24~28	5.5 (11.9)	93~96
		8.4 (330)	390~410	26~29	6.8 (14.8)	
		12.5 (492)	450~470	27~30	9.2 (20.5)	