

# SC-80K2

Type : Semi-Metal

## Conformances

AWS A5.36/ ASME SFA5.36 E80T1-C1A8-K2 H4  
(AWS A5.29/ ASME SFA5.29 E80T1-K2C)  
JIS Z3313 T55 6 T1-0 C A-N3 H5  
EN ISO 17632-A-T 46 6 1.5Ni R C1 3 H5  
KR 4Y40SG(C) H5, 4Y40MG(C)  
ABS 5Y400SA H5  
LR 5Y40S H5, 5Y40M H5  
BV SA5Y40 HHH

DNV-GL VY40MS H5, NV4-4L  
NK KAW54Y40MG(C),  
KSW54Y40MG(C)H5  
(-60°C≥34J)  
RS 5Y40S H5

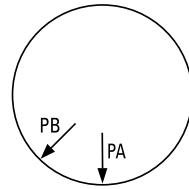
## Applications

- LPG and LNG storage tank
- Shipbuilding
- Offshore structure

## Features

- High speed single or twin tandem welding
- Low hydrogen level (H4)
- Low temperature service

## Welding Position



## Current

DC +

## Shielding Gas

100% CO<sub>2</sub>

## Diameter / Packaging

Diameter mm (in)	Spool			Pac		
	5kg (11lbs)	15kg (33lbs)	20kg (44lbs)	250kg (551lbs)	300kg (661lbs)	500kg (771lbs)
1.2 (0.045)		√		√	√	√
1.4 (0.052)		√		√	√	√

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

C	Si	Mn	P	S	Ni
0.06	0.43	1.45	0.011	0.008	1.57

**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)
575 (83,375)	635 (92,075)	26.5	-60 (-76)	60 (44)

**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>	20-25 (51/64~1)	10.4 (410)	200	26	3.5 (7.7)	85-87
		12.7 (500)	250	30	4.7 (10.4)	87-89
		15.3 (600)	300	33	6.3 (13.9)	91-93
<b>1.4mm (0.052 in) DC+</b>						
100% CO <sub>2</sub>	20-25 (51/64~1)	12.0 (470)	300	31	5.6 (12.3)	90-92
		13.3 (520)	350	36	6.7 (14.8)	91-93

SWAW

SAW

GMAW

GTAW

FCAW

Non-FERROUS

APPENDIX