



Conformances

AWS A5.36/ ASME SFA5.36 E70T15-M21A4-CS1
 (AWS A5.18/ ASME SFA5.18 E70C-6M)
 JIS Z3313 T49 4 T15-1 M A-U H5
 EN ISO 17632-A-T 46 4 M M21 2 H5
 ABS 4Y400SA H5
 LR 4Y40S H5
 BV SA4Y40M HHH

DNV-GL IVY40MS H5
 TÜV EN ISO 17362-A - T46 4 M M2 H5
 DB DIN EN ISO 17632-A-T 46 4 M M21 2 H5
 CE
 CWB CSA W48 E491C-6MJ-H4

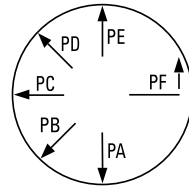
Applications

- General fabrication
- Heavy equipment
- Offshore structure

Features

- Good impact value at low temperature
- Semi-automatic and automatic applications
- Good anti-porosity

Welding Position



Current

DC +

Shielding Gas

Ar + 20~25% CO₂

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	Ni
0.04	0.56	1.57	0.011	0.014	0.35

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)
476 (73,950)	553 (81,200)	27	-40 (-40)	75 (55)

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+						
Flat & Horizontal						
80% Ar + 20% CO ₂	19-25 (3/4-1)	7.3 (288)	190-210	22-26	3.4 (7.6)	90-96
		9.7 (382)	240-260	23-27	4.5 (9.7)	
		12.2 (489)	280-310	24-30	5.9 (12.8)	
1.4mm (0.052 in) DC+						
Flat & Horizontal						
80% Ar + 20% CO ₂	19-25 (3/4-1)	6.7 (261)	250-270	22-26	3.8 (8.3)	91-96
		7.8 (307)	290-310	25-31	4.9 (10.4)	
		9.4 (370)	330-350	28-32	5.5 (12.0)	
1.6mm (1/16 in) DC+						
Flat & Horizontal						
80% Ar + 20% CO ₂	25-32 (1-1 1/4)	5.6 (220)	290-310	26-32	4.5 (9.3)	92-96
		6.8 (270)	340-350	29-33	5.6 (12.1)	
		7.8 (310)	350-370	31-34	6.7 (14.3)	