



Conformances

AWS	A5.18 / ASME SFA5.18 ER70S-6
JIS	Z3312 YGW12
EN	ISO 14341-A G 42 2 C 3Si1 / 14341-A G 42 4 M 3Si1
KR	3SG, 3YSG(C)
ABS	3SA, 3YSA
LR	3YS, 3YM H15
TÜV	EN ISO 14341-A - G42 2 C1 3Si1 / G42 4 M21 3Si1
DB	DIN EN ISO 14341-A-G 42 2 C1 3Si1 DIN EN ISO 14341-A-G 42 4 M21 3Si1

BV	SA3,SA3YM
DNV	IIIYMS
GL	3YS
NK	KSW53G(C)
CWB	CSA W48 B-G 49A 3 C G6
NAKS	
RS	3YSM
CE	

Applications

- General fabrication
- Steel Industry
- Automotive

Features

- All position welding by short-circuiting type transfer
- Stable arc and low spatter
- Good bead appearance

Welding Position



1G 2F 3G 4G
(PA) (PB) (PF-PG) (PE)

Current

DC +

Shielding Gas

100% CO₂
Ar + 20~25% CO₂

Diameter / Packaging

Diameter mm (in)	Spool			Pac		
	5kg (11lbs)	15kg (33lbs)	20kg (44lbs)	250kg (551lbs)	300kg (661lbs)	350kg (771lbs)
0.8 (0.033)	✓	✓	✓	✓	✓	✓
0.9 (0.035)	✓	✓	✓	✓	✓	✓
1.0 (0.040)	✓	✓	✓	✓	✓	✓
1.2 (0.045)	✓	✓	✓	✓	✓	✓
1.4 (0.052)	✓	✓	✓	✓	✓	✓
1.6 (1/16)	✓	✓	✓	✓	✓	✓

Typical Chemical Composition of the Wire(%)

C	Si	Mn	P	S
0.07	0.83	1.48	0.011	0.015

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)
As welded with 100% CO ₂	460 (67,000)	555 (80,000)	29.3	-29 (-20)	85 (63)
As welded with 80% Ar + CO ₂	495 (72,000)	585 (85,000)	27.5	-29 (-20)	113 (83)
As welded with 90% Ar + CO ₂	495 (72,000)	590 (85,600)	26.4	-29 (-20)	101 (74)

Typical Operating Procedures

Diameter, Polarity Shielding Gas	CTWD mm(in)	Wire Feed Speed m/min (in/min)	Voltage (volts)	Approx. Current (amps)	Melt-Off Rate kg/hr (lb/hr)
1.2mm (0.045in), DC +					
100% CO ₂ Gas	20 (3/4)	5.8 (230)	18.5	150	2.9 (6.4)
		9.0 (350)	25	200	4.5 (9.9)
		14.5 (570)	31	280	7.3 (16.1)
Mixed Gas (Ar + CO ₂)	20 (3/4)	3.7 (145)	17.5	150	1.9 (4.2)
		6.2 (244)	24	200	3.1 (6.8)
		11.2 (440)	30	280	5.6 (12.3)
1.4mm (0.052in), DC +					
100% CO ₂ Gas	20 (3/4)	8.8 (346)	29	250	6.1 (13.4)
		12.0 (472)	34	300	8.3 (18.3)
		14.6 (575)	36	340	10.1 (22.2)
Mixed Gas (Ar + CO ₂)	20 (3/4)	6.6 (260)	28	250	4.6 (10.1)
		8.7 (343)	32	300	6.0 (13.2)
		9.5 (374)	35	340	6.6 (14.5)
1.6mm (1/16in), DC +					
100% CO ₂ Gas	20 (3/4)	8.6 (339)	34	320	7.8 (17.2)
		9.4 (370)	37	340	8.5 (18.7)
		11.7 (460)	43	390	10.6 (23.3)
Mixed Gas (Ar + CO ₂)	20 (3/4)	6.2 (244)	30	320	5.6 (12.3)
		6.6 (260)	34	340	6.0 (13.2)
		8.2 (322)	38	390	7.4 (16.3)