

# SM-70

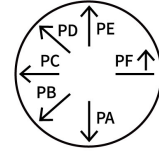
## Classification

**AWS** A5.18/ASME SFA-5.18 ER70S-6

**JIS** Z 3312 YGW12

**EN** ISO 14341-A G 42 2 C1 3Si1 / 14341-A G 42 5 M21  
3Si1

## Welding Positions



## Features

- All position welding by short-circuiting type transfer
- Stable arc and low spatter
- Good Bead Appearance

## Application Areas

- Structural fabrication
- Automotive
- Machinery

## Polarity

DC +

## Shielding Gas

100% CO<sub>2</sub>  
Ar + 20% CO<sub>2</sub>

## Approvals

ABS	BV	DNV	KR	LR	NK	RINA	RS	CWB	CE	DB	TUV
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

## Typical Chemical Composition of the Wire (wt%)

C	Si	Mn	P	S	Cu	Ni	Cr	Mo	V
0.08	0.85	1.52	0.019	0.009	0.21	0.02	0.03	0.01	0.01

## Typical Mechanical Properties of All-Weld Metal

Shielding Gas	Yield Strength MPa(ksi)	Tensile Strength MPa(ksi)	Elongation (%)	Temperature °C (°F)	Impact Toughness J (ft·lbs)
100% CO <sub>2</sub>	460 (67)	560 (81)	28	0 (32)	120 (89)
				-30 (-20)	70 (52)
Ar + 20% CO <sub>2</sub>	470 (68)	570 (83)	26	0 (32)	140 (103)
				-30 (-20)	90 (66)

## Diameter / Welding Parameters / Packaging

Wire Diameter mm(in)	Packaging
0.8 (0.030), 0.9 (0.035), 1.0 (0.039), 1.2 (0.045), 1.4 (0.052), 1.6 (1/16)	Spool 15kg(33lbs), 20kg (44lbs) Drum 250kg (551lbs), 300kg (661lbs), 350kg (771lbs)