

# SM-70

AWS A5.18 / ASME SFA5.18 ER70S-6  
EN ISO 14341-A G 42 2 C 3Si1  
EN ISO 14341-A G 46 4 M 3Si1  
AS/NZS 2717.1 ES6-GC/M-W503AH (superseded)

## Applications

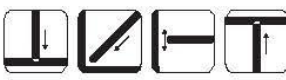
Butt and fillet welding of steel structures such as vehicles, machinery and bridges.

## Characteristics on Usage

SM-70 is a solid wire designed for used Ar+CO<sub>2</sub> mixed gas. Its property is similar to SM-70 (N) but with superior bead appearance and lower spatter. The electrolytically applied copper coating ensures optimum feedability and current transfer at the contact tip.

## Notes on Usage

- 1) Use with 100% CO<sub>2</sub> or Argon+15~25% CO<sub>2</sub> gas.
- 2) The shielding gas flow should be approximately 25 L/min.
- 3) Use wind screen in draughty conditions.
- 4) Keep distance between tip and base metal 6~15mm for less than 250A, and 15~25mm for more than 250A of welding current.

Welding Position	Current	Shielding Gas
 1G (PA)   2F (PB)   3G (PF, PG)   4G (PE)	DC +	CO <sub>2</sub> or Ar + CO <sub>2</sub>

## Typical Chemical Composition of Wire (%)

C	Si	Mn	P	S
0.08	0.95	1.70	0.019	0.015

## Typical Mechanical Properties of All-Weld Metal

YS MPa	TS MPa	EL (%)	Temp. °C	CVN-Impact Value J °C
461	560	29	-29	95

## Approval I Packing (Including Ball Pac)

TÜV, DB, CE, DNV, GL	Dia. (mm)	0.8	0.9	1.0	1.2	1.6	Spool (kg)	5	15	
							Ball Pac (kg)	250	300	400

## Sizes Available and Recommended Current (Amp.)

Size, mm	0.8	0.9	1.0	1.2	1.6
F & HF	40-180	50~220	80~270	100~320	170~390
V-up, OH	40-110	50~140	50~150	60~160	-

Diam.	5 kg Spool	15 kg Spool	Ball Pac Drum / weight
0.8mm	HCSM700805	HCSM700815	
0.9mm	HCSM700905	HCSM700915	HCSM7009250 250kg
1.0mm		HCSM701015	HCSM7010300 300kg
1.2mm		HCSM701215	HCSM7012300 300kg
1.6mm		HCSM701615	HCSM7016400 400kg

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