

# SM-70GS

Mild Steel & 490 MPa high tensile steels

## Conformances

AWS A5.18/ ASME SFA5.18 ER70S-G

JIS Z3312 YGW15

EN ISO 14341-A G2Si

LR 3YSH15

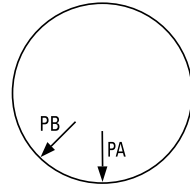
## Applications

- Shipbuilding
- Structural fabrication
- Machinery

## Features

- Mixed gas
- Good performance high-current

## Welding Position



## Current

DC +

## Shielding Gas

Ar + CO<sub>2</sub>

## Diameter / Packaging

Diameter	Spool			Ball Pac		
	5kg (11lbs)	15kg (33lbs)	20kg (44lbs)	250kg (551lbs)	300kg (661lbs)	350kg (771lbs)
mm (in)						
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	Ti
0.06	0.62	1.21	0.013	0.007	0.10

**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)
As welded with 80% Ar + CO <sub>2</sub>	480 (69,600)	550 (79,700)	28.0	-20 (-4)	186 (128)
As welded with 90% Ar + CO <sub>2</sub>	515 (74,600)	556 (80,600)	27.4	-20 (-4)	173 (119)

**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)
<b>1.2mm (0.045in), DC +</b>					
Mixed Gas (Ar + CO <sub>2</sub> )	20 (3/4)	10.1 (397)	250	28	5.1 (11.2)
		11.2 (440)	280	30	5.6 (12.3)
		12.8 (503)	320	33	6.5 (14.3)

SMAG

SAW

GMAG

GTAW

FCAGW

Non-FERROUS

APPENDIX