

Applications


Flat and horizontal fillet welding of construction machinery, structural steels, bridges, ships, vehicles, etc.

Characteristics on Usage

SM-70G is a solid MIG wire for flat and horizontal fillet welding and is to be used in a high current welding with CO₂ shielding gas. It benefits from a high deposition rate and excellent penetration. As this wire contains special elements, its weldability and impact values are excellent.

Notes on Usage

- ① Use with CO₂ gas.
- ② Flow quantity of shielding gas should be 25ℓ /min. approximately.
- ③ Use wind screen against wind.
- ④ Keep distance between tip and base metal of 6~15mm for less than 250A, and 15~25mm for more than 250A of welding current.

Welding Position	Current	Shielding Gas
 1G 2F (PA) (PB)	DC +	CO ₂

Typical Chemical Composition of Wire (%)

C	Si	Mn	P	S	Ti
0.05	0.82	1.53	0.013	0.010	0.18

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)
450 (65,300)	560 (81,200)	28	-29 (-20)	80 (59)

Approval

I Packing (Including Ball Pac)

KR, ABS, LR, BV, DNV, GL, NK,	Dia. (mm)	0.9	1.2	1.4	1.6	Spool(kg) (lbs)	15 20 33 44
	(in)	.035	.045	.052	1/16		
	Ball Pac						

Sizes Available and Recommended Currents (Amp.)

Size mm(in)	1.2 (.045)	1.4 (.052)	1.6 (1/16)
F & HF	200~350	250~450	300~550