

## Applications

Butt and fillet welding of steel structures and using 550MPa or 600MPa tensile steels such as construction machinery, buildings and pressure vessels.

## Characteristics on Usage

SM-80G is a solid wire for flat and horizontal fillet welding position. As the deposition rate is very high, highly efficient welding can be performed.

As the wire contains special elements, its bead appearance is excellent.

## Notes on Usage

- ① Use with CO<sub>2</sub> 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



1G 2F  
(PA) (PB)

## Current

DC +

## Shielding Gas

CO<sub>2</sub>

## Typical Chemical Composition of Wire (%)

C	Si	Mn	P	S	Mo	Ti
0.06	0.81	1.85	0.018	0.007	0.27	0.15

## 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)
580 (84,200)	660 (95,800)	24	-20 (-4)	120 (88)

## Approval

## I Packing (Including Ball Pac)

ABS	Dia. (mm)	1.2	1.4	1.6	Spool(kg)	15 20
	(in)	.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	280~500	300~550