

Applications

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

Characteristics on Usage

SM-55H is a solid wire for flat and horizontal fillet welding and is to be used in 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 Shielding gas flow rate should be 25ℓ /min.
- 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

CO₂

Typical Chemical Composition of Wire (%)

C	Si	Mn	P	S	Ti
0.07	0.89	1.95	0.016	0.007	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)
550 (79,800)	630 (91,500)	28	0 (32)	110 (81)

Approval

I Packing (Including Ball Pac)

Dia. (mm)	1.2	1.4	1.6	Spool(kg)	15	20
(in)	.045	.052	1/16	(lbs)	33	44
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