

Applications

S-9016.G can be used for welding of high tensile steel such as pressure vessels, bridges, rolling stock, and machines using steel plates of high tensile steel.

Characteristics on Usage

- Good workability in all positions.
- Stable arc.
- Excellent mechanical properties and X-ray performance.

Notes on Usage

- ① Dry the electrodes at 350~400 °C(662~752°F) for 60 minutes before use.
- ② Adopt back step method or strike the arc on a small steel plate prepared for this particular purpose because arc striking on the base metal is in danger of initiating cracking.
- ③ Keep the arc as short as possible.
- ④ Preheat at 60~80°C(140~176°F) before use. The temperature to be applied varies in accordance with plate thickness and steel kind.
- ⑤ If each pass welds becomes thicker than acceptable level by high amperage of low speed ratio manipulation, the impact values and yield points will decrease.

Welding Position



1G (PA) 2F (PB) 3G (PF) 4G (PE)

Current

AC or DC +

Typical Chemical Composition of All-Weld Metal (%)

C	Si	Mn	P	S	Ni	Mo
0.06	0.52	1.09	0.016	0.010	0.56	0.23

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)
570 (82,800)	655 (95,100)	27.2	0 (32) -20 (-4)	125 (93) 78 (58)

Approval

ABS

I Packing

Packet 5 kg (11 lbs)
 Carton 5 kg (11 lbs) × 4 : 20kg(44 lbs)

Sizes Available and Recommended Currents (Amp.)

Size mm (in)	2.6 (3/32)	3.2 (1/8)	4.0 (5/32)	5.0 (3/16)	6.0 (15/64)
Length mm(in)	350 (14)	350 (14)	400 (16)	400 (16)	450 (18)
F	55~90	90~130	130~180	180~240	250~310
V-up, OH	50~80	85~120	110~170	150~200	-