S-8018.G

TYPE : Basic

AWS A5.5 / ASME SFA5.5 E8018-G
JIS Z3211 E5518
EN ISO 2560-A - E46 2 1Ni B 3 2

Applications

S-8018.G can be used for welding of high tensile of shipbuilding, buildings, bridges and pressure vessels.

Characteristics on Usage

S-8018.G is an iron powder-low hydrogen type electrode for all position welding.
As its deposition rate is extremely high, working hours can be shortened.
The mechanical properties and crack resistibility of the all-weld metal are also good.

Notes on Usage

① Dry the electrodes at 350~400 ℃(662~752℉) for 60 minutes before use.
② Adopt back step method or strike the arc on a small 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.

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
0.07	0.61	1.29	0.016	0.012	0.83

Typical Mechanical Properties of All-Weld Metal

YS MPa(lbs/in²)	TS MPa(lbs/in²)	EL (%)	Temp. ℃ (℉)	CVN-Impact Value J (ft · lbs)
542 (78,700)	622 (90,300)	30.2	0 (32) -20 (-4)	147 (109) 103 (76)

Approval

I Packing

Packet 5 ㎏ (11 lbs)
Carton 5 ㎏ (11 lbs) × 4 : 20㎏(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	60~90	90~140	130~190	180~240	250~300
V-up, OH	50~80	80~120	120~170	150~200	-