S-8018.C3

TYPE : Basic

AWS A5.5 / ASME SFA5.5 E8018-C3
JIS Z3211 E5518-N2
EN ISO 2560-A - E46 4 1Ni B 3 2

Applications

S-8018.C3 can be used for welding of high tensile steel and 1%Ni steel used in machinery, pressure vessels, storage tanks for low temperature.

Characteristics on Usage

- S-8018.C3 is an iron powder low hydrogen type electrode for all position welding.
- Good toughness of weld metal at low temperature.
- As its deposition rate is extremely high, working hours can be shortened.
- X-ray performance and usability are 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 steel plate prepared for this particular purpose, because arc striking on the base metal is in danger of initiating cracking.
③ Preheat at 80~100℃(176~212℉) before use. The temperature to be applied varies in accordance with plate thickness and steel kind.

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	0.59	1.00	0.020	0.009	0.94

Typical Mechanical Properties of All-Weld Metal

YS MPa(lbs/in²)	TS MPa(lbs/in²)	EL (%)	Temp. ℃ (℉)	CVN-Impact Value J (ft · lbs)
540 (78,400)	619 (89,900)	30.8	-40 (-40)	76 (56)

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	55~90	90~130	130~190	190~240	250~300
V-up, OH	50~80	80~120	120~170	-	-