S-7018.G

Type : Basic

CE

Conformances

AWS A5.1/ ASME SFA5.1 E7018
JIS Z3211 E4918
EN ISO 2560-A-E42 3 B 1 2
KR 3H10, 3Y H10
ABS 3H10, 3Y
LR 3YH15
BV 3YHH
DNV·GL 3YH10
NK KMW53HH
TÜV EN ISO 2560-A-E 42 3 B 1 2 H5
DB EN ISO 2560-A-E 42 3 B 1 2 H5
CWB CSA W48 E4918-H8
CE

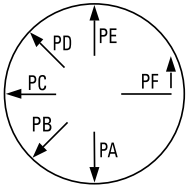
Applications

- Heavy steel fabrication
- Shipbuilding
- Pressure vessels

Features

- Suitable for butt and fillet welding of heavy structure
- Good crack resistance and X-ray performance
- Good mechanical properties
- Iron powder and low hydrogen type electrode (high efficiency)

Welding Position



Current

AC or DC +

Redrying Conditions

300~350°C (572~662°F) X 0.5~1hr

Diameter / Packaging

Diameter	Length	Standard / Vacuum	
		packet	carton
mm (in)	mm (in)	5kg(11lbs)	20kg(44lbs)
2.6 (3/32)	350 (14)	√	
3.2 (1/8)	350 (14)	√	
4.0 (5/32)	400 (16)	√	
5.0 (3/16)	400 (16)	√	
5.5 (7/32)	450 (18)	√	
6.0 (15/64)	450 (18)	√	

Typical Chemical Composition of All-Weld Metal (%)

C	Si	Mn	P	S
0.06	0.50	1.20	0.017	0.011

Typical Mechanical Properties of All-Weld Metal

YS MPa(lbs/in²)	TS MPa(lbs/in²)	EL (%)	Temp °C(°F)	CVN-Impact Value J (ft·lbs)
504 (73,200)	572 (83,100)	29.8	-30 (-22)	111 (82)

Typical Welding Parameters / Amp.(A)

Diameter mm (in)	2.6 (3/32)	3.2 (1/8)	4.0 (5/32)	5.0 (3/16)	5.5 (7/32)	6.0 (15/64)
Length mm (in)	350 (14) -	350 (14) 400 (16)	400 (16) 450 (18)	400 (16) 450 (18)	450 (18)	450 (18)
F	60~90	90~140	130~190	180~240	220~260	250~300
V-up, OH	50~80	80~120	120~170	150~200	-	-