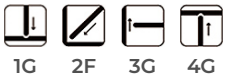
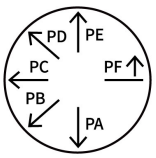
S-7018.1H

Classification

AWS A5.1/ASME SFA-5.1 E7018-1 H4R
A5.1/ASME SFA-5.1 E7018 H4R
JIS Z 3211 E4918 H5
EN ISO 2560-A E42 4 B 3 2 H5
KS D7006 E5016

Welding Positions





Features

- Extra low hydrogen electrode
- Good impact value at -45°C
- Vacuum sealed package available (HDM ≤ 4ml/100g)

Polarity

AC or DC +

Application Areas

- Heavy steel fabrication
- Low temperature strength steel
- Offshore structure

Redrying Conditions

350~400°C (662~752°F) X 0.5~1hr

Approvals

ABS	BV	DNV	LR	CWB	CE
✓	✓	✓	✓	✓	✓

Typical Chemical Composition of All-Weld Metal (wt%)

C	Si	Mn	P	S	Ni
0.09	0.25	1.27	0.017	0.005	0.02

Typical Mechanical Properties of All-Weld Metal

PWHT	Yield Strength MPa(ksi)	Tensile Strength MPa(ksi)	Elongation (%)	Temperature °C (°F)	Impact Toughness J (ft·lbs)
As-weld	461(67)	570(83)	31	-45(-50)	100(74)
620°C*7hr	451(65)	551(80)	31	-45(-50)	82(61)

Diameter / Welding Parameters / Packaging

Diameter mm(in)	Length mm(in)	F & HF	V-up, OH	Packaging
2.6(3/32)	350(14)	60-90	50-80	Standard/Vacuum - Packet 5kg (11lbs), Carton 20kg (44lbs)
3.2(1/8)	350(14)/400(16)	90-140	80-120	
4.0(5/32)	400(16)/450(18)	130-190	120-170	
5.0(3/16)	400(16)/450(18)	180-240	150-200	