

S-8018.C3

Classification

AWS A5.5/ASME SFA-5.5 E8018-C3 H4R
JIS Z 3211 E5518-N2 H5
EN ISO 2560-A E46 4 1Ni B 3 2 H5

Welding Positions



Features

- Good impact value at -40°C
- Iron powder and low hydrogen type electrode (high efficiency)

Polarity

AC or DC +

Application Areas

- Low temperature strength steel (1% Ni)
- Offshore structure

Redrying Conditions

350~400°C (662~752°F) X 0.5~1hr

Approvals

ABS	CE
✓	✓

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

C	Si	Mn	P	S	Ni
0.10	0.45	1.15	0.014	0.006	1.03

Typical Mechanical Properties of All-Weld Metal

Yield Strength MPa(ksi)	Tensile Strength MPa(ksi)	Elongation (%)	Temperature °C (°F)	Impact Toughness J (ft·lbs)
520(75)	612(89)	28	-40(-40)	55(41)

SAW

GMAW

GTAW

FCAW

Metal-cored Wire

SAW Wire

SAW Flux

Diameter / Welding Parameters / Packaging

Diameter mm(in)	Length mm(in)	F & HF	V-up, OH	Packaging
2.6(3/32)	350(14)	55-90	50-80	Standard/Vacuum - Packet 5kg (11lbs), Carton 20kg (44lbs)
3.2(1/8)	350(14)	90-130	80-120	
4.0(5/32)	400(16)	130-190	110-170	
5.0(3/16)	400(16)	190-250	-	
6.0(15/64)	450(18)	250-310	-	

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