

S-4301.I

Classification

AWS A5.1/ASME SFA-5.1 E6019
JIS Z 3211 E4319
EN ISO 2560-A E35 2 RA 1 2
KS D7004 E4301

Welding Positions



Features

- Suitable for butt and fillet welding of thin and medium-thick plates (up to 20mm)
- Good crack resistance, pitting resistance
- Good X-ray performance

Polarity

AC or DC ±

Application Areas

- General fabrication
- Shipbuilding
- Suitable for high impact value required parts

Redrying Conditions

70~100°C (158~212°F) X 0.5~1hr

Approvals

ABS	BV	DNV	KR	LR	NK
✓	✓	✓	✓	✓	✓

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

C	Si	Mn	P	S
0.07	0.17	0.50	0.021	0.008

Typical Mechanical Properties of All-Weld Metal

Yield Strength MPa(ksi)	Tensile Strength MPa(ksi)	Elongation (%)	Temperature °C (°F)	Impact Toughness J (ft·lbs)
380(55)	458(66)	28	-20(0)	52(38)

SMAW

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)	50-85	45-70	Standard/Vacuum - Packet 5kg (11lbs), Carton 20kg (44lbs)
3.2(1/8)	350(14)/400(16)	80-130	60-110	
4.0(5/32)	400(16)/450(18)	120-180	110-150	
5.0(3/16)	400(16)/450(18)	170-250	130-200	
6.0(15/64)	450(18)	240-310	-	

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