

S-8018.C3

Type : Basic

Conformances

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

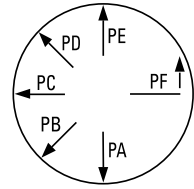
Applications

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

Features

- Good impact value at -40°C
- 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 mm (in) | Length mm (in) | Standard | |
|---------------------|-------------------|----------------------|-----------------------|
| | | packet 5kg(11lbs) | carton 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) | | ✓ |
| 6.0 (15/64) | 450 (18) | | ✓ |

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/in ²) | TS MPa(lbs/in ²) | EL (%) | Temp °C(°F) | CVN-Impact Value J (ft.lbs) |
|---------------------------------|---------------------------------|-----------|----------------|--------------------------------|
| 540 (78,400) | 619 (89,900) | 30.8 | -40 (-40) | 76 (56) |

Typical Welding Parameters / Amp.(A)

| Diameter 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 | - | - |

SMAW

SAW

GMAW

GTAW

FCAW

Non-FERROUS

APPENDIX