

S-7016.M

Type : Basic

Conformances

| | |
|-----|-------------------------|
| AWS | A5.1/ ASME SFA5.1 E7016 |
| JIS | Z3211 E4316 |
| EN | ISO 2560-A-E42 2 B 1 2 |
| KR | 3H10, 3YH10 |
| ABS | 3H10, 3Y |
| NK | KMW53HH |

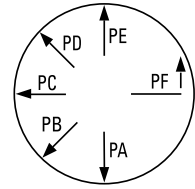
Applications

- Heavy steel fabrication
- Shipbuilding
- Pressure vessels

Features

- Suitable for butt and fillet welding of heavy structure
- Good X-ray performance
- Good mechanical properties

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 |
|------|------|------|-------|-------|
| 0.08 | 0.64 | 1.18 | 0.018 | 0.009 |

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) |
|---------------------------------|---------------------------------|-----------|----------------|--------------------------------|
| 539 (78,300) | 617 (89,600) | 26.5 | -20 (-4) | 73 (54) |

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 | 55~85 | 90~140 | 140~190 | 190~250 | 250~320 |
| V-up, OH | 50~80 | 80~130 | 110~170 | 160~210 | - |

SMAW

SAW

GMAW

GTAW

FCAW

Non-FERROUS

APPENDIX