

SC-71MJ

Type : Rutile

Conformances

AWS A5.36/ ASME SFA5.36 E71T1-M21A4-CS1
(AWS A5.20/ ASME SFA5.20 E71T-9M-J)
JIS Z3313 T49 4 T1-1 M A-U H5
EN ISO 17632-A-T 46 4 P M21 1 H5
ABS 4YSA, 4Y400SA H5

LR 4Y40S H5
BV SA4Y, SA4Y40 HHH
DNV-GL IVY40MS (H5)

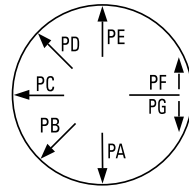
Applications

- Shipbuilding
- Pipe line
- Offshore structure

Features

- Good impact value at low temperature
- Smooth and stable arc with a fast freezing slag
- Low hydrogen level(H5)
- Designed for welding with Ar-CO₂ mixture

Welding Position



Current

DC +

Shielding Gas

Ar + 20~25% CO₂

Diameter / Packaging

| Diameter | Spool | | | Pac | | |
|-------------|-------------|--------------|--------------|----------------|----------------|----------------|
| | 5kg (11lbs) | 15kg (33lbs) | 20kg (44lbs) | 100kg (221lbs) | 200kg (441lbs) | 250kg (551lbs) |
| 1.2 (0.045) | ✓ | ✓ | | | | |
| 1.4 (0.052) | ✓ | ✓ | | | | |
| 1.6 (1/16) | ✓ | ✓ | | | | |

Typical Chemical Composition of All-Weld Metal (%)

| C | Si | Mn | P | S | Ni |
|------|------|------|-------|-------|------|
| 0.06 | 0.30 | 1.10 | 0.012 | 0.011 | 0.42 |

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) |
|---------------------------------|---------------------------------|-----------|------------------------|---------------------------------|
| 545 (79,100) | 583 (84,500) | 25.0 | -30 (-22) -40 (-40) | 126 (93) 80 (59) |

Typical Welding Parameters

| Diameter, Polarity Shielding Gas | CTWD mm (in) | Wire Feed Speed m/min (in/min) | Amp. (A) | Volt. (V) | Deposition Rate kg/hr (lb/hr) | Efficiency (%) | |
|-------------------------------------|-----------------|-----------------------------------|-------------|--------------|----------------------------------|-------------------|-------|
| 1.2mm (0.045 in) DC+ | | | | | | | |
| 80% Ar + 20% CO ₂ | 25 (1) | All Position | | | | | 86-88 |
| | | 4.4 (175) | 110-140 | 20-25 | 1.6 (3.5) | | |
| | | 5.7 (225) | 120-150 | 21-26 | 2.0 (4.5) | | |
| | | 7.0 (275) | 130-160 | 22-27 | 2.5 (5.5) | | |
| | | 8.3 (325) | 160-190 | 22-27 | 2.9 (6.5) | | |
| | | 8.9 (350) | 170-200 | 23-28 | 3.2 (7.0) | | |
| | | 10.2 (400) | 200-230 | 24-29 | 3.6 (8.0) | | |
| | | Flat & Horizontal | | | | | |
| | | 11.4 (450) | 210-240 | 25-31 | 4.1 (9.1) | | |
| | | 12.1 (475) | 230-260 | 26-32 | 4.3 (9.5) | | |
| 13.3 (525) | 250-280 | 27-33 | 4.7 (10.4) | | | | |
| 1.4mm (0.052 in) DC+ | | | | | | | |
| 80% Ar + 20% CO ₂ | 25 (1) | All Position | | | | | 86-88 |
| | | 3.8 (150) | 120-150 | 22-27 | 1.8 (3.9) | | |
| | | 4.4 (175) | 130-160 | 21-26 | 2.1 (4.6) | | |
| | | 5.1 (200) | 160-190 | 22-27 | 2.4 (5.2) | | |
| | | 5.7 (225) | 180-210 | 23-28 | 2.7 (5.9) | | |
| | | 6.4 (250) | 200-230 | 24-29 | 2.9 (6.5) | | |
| | | 7.6 (300) | 220-250 | 25-30 | 3.5 (7.8) | | |
| | | Flat & Horizontal | | | | | |
| | | 8.9 (350) | 260-290 | 28-32 | 4.1 (9.1) | | |
| | | 11.4 (450) | 310-330 | 29-34 | 5.3 (11.7) | | |
| 1.6mm (1/16 in) DC+ | | | | | | | |
| 80% Ar + 20% CO ₂ | 25 (1) | All Position | | | | | 86-88 |
| | | 3.8 (150) | 170-200 | 21-26 | 2.5 (5.5) | | |
| | | 4.4 (175) | 180-210 | 22-27 | 2.9 (6.4) | | |
| | | 5.1 (200) | 200-230 | 22-28 | 3.3 (7.3) | | |
| | | 5.7 (225) | 230-260 | 24-29 | 3.7 (8.2) | | |
| | | 6.4 (250) | 250-280 | 25-30 | 4.2 (9.2) | | |
| | | 7.6 (300) | 280-310 | 26-31 | 5.0 (11.0) | | |
| | | Flat & Horizontal | | | | | |
| | | 8.3 (325) | 300-330 | 27-32 | 5.4 (11.9) | | |
| | | 8.9 (350) | 330-360 | 28-33 | 5.8 (12.8) | | |
| 10.2 (450) | 380-410 | 29-34 | 6.6 (14.6) | | | | |

SWAW

SAW

GMAW

GTAW

FCAW

Non-FERROUS

APPENDIX