

Supercored 70B

Type : Basic



Conformances

AWS A5.36/ ASME SFA5.36 E71T5-M21A4-CS1 H4

(AWS A5.20/ ASME SFA5.20 E70T-5M-J)

JIS Z3313 T49 4 T5-1 M A-U H5

EN ISO 17632-A-T 42 4 B M21 3 H5

ABS 3YSA H5

LR 3S, 3YS H5

BV SA3YM HHH

DNV-GL IIIYMS H5

TÜV EN ISO 17632-A-T42 4 B M 3 H5

DB EN ISO 17632-A-T42 4 B M21 3 H5

CE

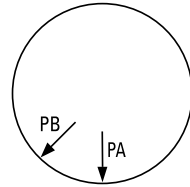
Applications

- Shipbuilding
- Structural fabrication

Features

- Good crack resistance
- Good impact value at low temperature
- Good anti-porosity

Welding Position



Current

DC +

Shielding Gas

Ar + 20~25% CO₂

Diameter / Packaging

| Diameter mm (in) | Spool | | | Pac | | |
|---------------------|-------------|--------------|--------------|----------------|----------------|----------------|
| | 5kg (11lbs) | 15kg (33lbs) | 20kg (44lbs) | 100kg (221lbs) | 200kg (441lbs) | 250kg (551lbs) |
| 1.0 (0.040) | √ | √ | √ | | | |
| 1.2 (0.045) | √ | √ | √ | | | |
| 1.4 (0.052) | √ | √ | √ | | | |
| 1.6 (1/16) | √ | √ | √ | | | |

Typical Chemical Composition of All-Weld Metal (%)

| C | Si | Mn | P | S |
|------|------|------|-------|-------|
| 0.06 | 0.43 | 1.33 | 0.011 | 0.013 |

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) |
|---------------------------------|---------------------------------|-----------|----------------|---------------------------------|
| 450 (65,300) | 520 (75,400) | 32.0 | -40 (-40) | 78 (58) |

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) | 4.5 (175) | 120-160 | 17-22 | 1.5 (3.3) | 86-88 |
| | | 6.4 (250) | 135-175 | 18-24 | 2.2 (4.8) | |
| | | 7.6 (300) | 150-180 | 19-25 | 2.5 (5.5) | |
| | | 8.9 (350) | 175-205 | 22-27 | 3.0 (6.6) | |
| | | 10.2 (400) | 185-220 | 24-29 | 3.5 (7.6) | |
| | | 11.5 (450) | 220-260 | 25-30 | 3.8 (8.4) | |
| | | 12.8 (500) | 250-290 | 26-31 | 4.4 (9.6) | |
| 15.3 (600) | 280-320 | 27-32 | 5.3 (11.6) | | | |
| 1.4mm (0.052 in) DC+ | | | | | | |
| 80% Ar + 20% CO ₂ | 25 (1) | 3.8 (150) | 130-170 | 19-24 | 1.9 (4.1) | 86-89 |
| | | 5.1 (200) | 160-200 | 20-25 | 2.5 (5.5) | |
| | | 6.4 (250) | 180-230 | 21-27 | 3.0 (6.6) | |
| | | 7.6 (300) | 220-260 | 22-28 | 4.2 (9.2) | |
| | | 10.2 (400) | 270-320 | 26-31 | 5.5 (12.1) | |
| | | 12.8 (500) | 300-350 | 27-33 | 6.0 (13.2) | |
| 1.6mm (1/16 in) DC+ | | | | | | |
| 80% Ar + 20% CO ₂ | 25 (1) | 3.2 (125) | 170-210 | 21-24 | 2.0 (4.4) | 86-89 |
| | | 3.8 (150) | 180-220 | 22-25 | 2.5 (5.5) | |
| | | 5.1 (200) | 220-260 | 24-28 | 3.2 (7.0) | |
| | | 6.4 (250) | 270-320 | 25-31 | 4.0 (8.8) | |
| | | 7.6 (300) | 300-350 | 27-33 | 5.0 (11.0) | |
| | | 10.2 (400) | 350-400 | 33-37 | 6.4 (14.0) | |

SWAW

SAW

GMAW

GTAW

FCAW

Non-FERROUS

APPENDIX