



Coreshield 8

Coreshield 8 is a self-shielded flux cored wire designed to weld critical structural applications while maintaining excellent arc characteristics and high welder appeal using DCEN polarity. Coreshield 8 is tested and certified to meet the new AWS D designation requirements, making this self-shielded wire an excellent choice for demand critical welds when the AWS D1.8 Seismic Supplement is utilized

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|------------------------|---|
| Classifications | ASME SFA 5.36 ASME SFA 5.20 AWS A5.36 : E71T8-A2-CS3-H8 AWS A5.20 : E71T-8 JD-H8 |
| Approvals | DB Seismic Certified "D" BV LR DNV-GL ABS CWB CSA W48 E491T-8-H8 |

Approvals are based on factory location. Please contact ESAB for more information.

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|------------------------|------|
| Welding Current | DC- |
| Alloy Type | C Mn |

Typical Tensile Properties

| Condition | Yield Strength | Tensile Strength | Elongation |
|-----------|------------------|------------------|------------|
| As Welded | 465 MPa (67 ksi) | 565 MPa (82 ksi) | 24 % |

Typical Charpy V-Notch Properties

| Condition | Testing Temperature | Impact Value |
|-----------|---------------------|-----------------|
| As Welded | -29 °C (-20 °F) | 41 J (30 ft-lb) |
| As Welded | 4 °C (40 °F) | 85 J (65 ft-lb) |

Typical Weld Metal Analysis %

| C | Mn | Si | S | P | Al |
|------|------|------|-------|-------|------|
| 0.19 | 0.44 | 0.15 | 0.003 | 0.010 | 0.51 |

Deposition Data

| Diameter | Current | Wire Feed Speed | Deposition Rate | Efficiency % |
|-----------------------|---------|-----------------------------|-------------------------|--------------|
| 1.8 mm (0.072 in.) | 200 A | 406 cm/min (160 in./min) | 2.8 kg/h (6.13 lb/h) | 79.4 % |
| 1.8 mm (0.072 in.) | 225 A | 483 cm/min (190 in./min) | 3.3 kg/h (7.32 lb/h) | 80.3 % |
| 1.6 mm (1/16 in.) | 155 A | 381 cm/min (150 in./min) | 1.9 kg/h (4.16 lb/h) | 78.6 % |
| 1.6 mm (1/16 in.) | 180 A | 470 cm/min (185 in./min) | 2.3 kg/h (5.14 lb/h) | 79.6 % |
| 1.6 mm (1/16 in.) | 205 A | 610 cm/min (240 in./min) | 3.0 kg/h (6.60 lb/h) | 78.2 % |
| 1.6 mm (1/16 in.) | 220 A | 698 cm/min (275 in./min) | 3.4 kg/h (7.53 lb/h) | 78.9 % |
| 2.0 mm (5/64 in.) | 150 A | 229 cm/min (90 in./min) | 1.8 kg/h (3.96 lb/h) | 80.6 % |
| 2.0 mm (5/64 in.) | 175 A | 279 cm/min (110 in./min) | 2.2 kg/h (4.83 lb/h) | 80.9 % |
| 2.0 mm (5/64 in.) | 200 A | 343 cm/min (135 in./min) | 2.7 kg/h (5.93 lb/h) | 80.4 % |