

## Coreshield 8

An all positional self-shielded cored wire ideal for welding outdoor structural steelwork.

### Specifications

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

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

|                        |      |
|------------------------|------|
| <b>Welding Current</b> | DC-  |
| <b>Alloy Type</b>      | C Mn |
| <b>Shielding Gas</b>   | None |

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

MILD STEEL

SELF-SHIELDED FLUX-CORED WIRES (FCAW)



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### Deposition Data

| Diameter               | Current | Wire Feed Speed               | Deposition Efficiency (%) | Deposition Rate            |
|------------------------|---------|-------------------------------|---------------------------|----------------------------|
| 2.0 mm<br>( 5/64 in. ) | 200 A   | 343 cm/min<br>( 135 in./min ) | 80.4 %                    | 2.7 kg/h<br>( 5.93 lbs/h ) |