

## Sureweld 7018

Sureweld 7018 is a general purpose, easy-to-use basic DC+ electrode with good mechanical properties for welding of mild steels. Sureweld 7018 is an excellent all around performer with good welder appeal, covering many applications for mild and low alloy steels.

| Classifications | AWS A5.1 : E7018<br>ASME SFA 5.1   |
|-----------------|--|
| Approvals       | ABS  |
| Industry        | Automotive Bridge Construction Civil Construction Industrial and General Fabrication Mobile Equipment Railcars Ship/Barge Building |

| Welding Current AC or DC+ |                          |  |
|---------------------------|--------------------------|--|
| Coating Type              | Low-hydrogen iron powder |  |
| CTOD-Tested               | false                    |  |

| Typical Tensile Properties                           |                    |                    |      |  |
|--|--------------------|--------------------|------|--|
| Condition Yield Strength Tensile Strength Elongation |                    |                    |      |  |
| As Welded  | 538 MPa ( 78 ksi ) | 607 MPa ( 88 ksi ) | 27 % |  |

| Typical Charpy V-Notch Properties |                     |                     |  |
|-----------------------------------|---------------------|---------------------|--|
| Condition                         | Testing Temperature | Impact Value        |  |
| As Welded                         | -29 °C ( -20 °F )   | 145 J ( 107 ft-lb ) |  |

| Typical Weld Metal Analysis % |      |      |       |       |
|-------------------------------|------|------|-------|-------|
| C Mn Si S P                   |      |      |       |       |
| 0.04                          | 1.33 | 0.58 | 0.005 | 0.012 |

| Deposition Data        |           |                           |                           |              |
|------------------------|-----------|---------------------------|---------------------------|--------------|
| Diameter               | Current   | Deposition Rate           | Deposition Efficiency (%) | Optimal Amps |
| 4.0 mm<br>( 5/32 in. ) | 130-220 A | 1.1 kg/h<br>( 3.1 lbs/h ) | 75 %                      | 140 A        |
| 3.2 mm<br>( 1/8 in. )  | 90-160 A  | 1.2 kg/h<br>( 2.6 lbs/h ) | 71.6 %                    | 120 A        |
| 2.4 mm<br>( 3/32 in. ) | 70-100 A  | 0.8 kg/h<br>( 1.7 lbs/h ) | 66.3 %                    | 90 A         |