

## Sureweld 710P

Sureweld 710P is an all-position cellulosic electrode that is especially suited for welding high strength pipe. It produces the consistent, deep penetration required to maintain a proper keyhole when vertical-down welding in open root pipe joints. X-ray quality joints can be produced with Sureweld 710P using flat, horizontal, overhead, vertical-up and vertical-down welding procedures. Sureweld 710P is recommended for welding API grades X46, X52, and X56 pipe. It may also be used for welding root passes in higher grade pipe in some circumstances.

### Specifications

|                        |                                                |
|------------------------|------------------------------------------------|
| <b>Classifications</b> | ASME SFA 5.5 : E7010-P1<br>AWS A5.5 : E7010-P1 |
| <b>Approvals</b>       | Conforms to E7010-G                            |
| <b>Industry</b>        | Industrial and General Fabrication<br>Pipeline |

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

|                        |                                   |
|------------------------|-----------------------------------|
| <b>Welding Current</b> | DC+                               |
| <b>Alloy Type</b>      | Low alloyed (0.5 % Ni, 0.25 % Mo) |

### Typical Tensile Properties

| Condition | Yield Strength     | Tensile Strength   | Elongation |
|-----------|--------------------|--------------------|------------|
| As Welded | 500 MPa ( 73 ksi ) | 593 MPa ( 86 ksi ) | 22 %       |

### Typical Charpy V-Notch Properties

| Condition | Testing Temperature | Impact Value      |
|-----------|---------------------|-------------------|
| As Welded | -30 °C ( -22 °F )   | 39 J ( 29 ft-lb ) |

### Typical Weld Metal Analysis %

| C    | Mn   | Si   | S    | P    | Ni   | Mo   |
|------|------|------|------|------|------|------|
| 0.10 | 0.30 | 0.20 | 0.02 | 0.01 | 0.50 | 0.24 |

### Deposition Data

| Diameter                           | Current   | Deposition Efficiency (%) | Deposition Rate @ 90% I max |
|------------------------------------|-----------|---------------------------|-----------------------------|
| 0.0 x 450.0 mm                     |           |                           | 0.0 kg/h ( 0.0 lbs/h )      |
| 2.4 x 304.8 mm ( 3/32 x 12.0 in. ) | 40-75 A   | 72 %                      | 0.7 kg/h ( 1.5 lbs/h )      |
| 3.2 x 350.0 mm ( 1/8 x 13.8 in. )  | 80-140 A  | 76.3 %                    | 0.9 kg/h ( 2.0 lbs/h )      |
| 4.0 x 350.0 mm ( 5/32 x 13.8 in. ) | 130-175 A | 73.6 %                    | 1.3 kg/h ( 2.9 lbs/h )      |
| 4.8 x 350.0 mm ( 3/16 x 13.8 in. ) | 150-210 A | 74.9 %                    | 1.5 kg/h ( 3.3 lbs/h )      |