

## PIPEWELD 9010 PLUS

Cellulosic coated electrode designed for low alloy steel. Deep penetration welding in all positions, especially in the vertical downward ; recommended for welding pipe-lines of API 5LX: X70- X80.

### Specifications

|                        |                                                              |
|------------------------|--------------------------------------------------------------|
| <b>Classifications</b> | SFA/AWS A5.5 : E9010-P1<br>EN ISO 2560-A : E 50 2 1NiMo C 21 |
| <b>Approvals</b>       | FBTS : E 9010-P1                                             |

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

|                        |                                  |
|------------------------|----------------------------------|
| <b>Welding Current</b> | DC+                              |
| <b>Alloy Type</b>      | Low alloyed (0.9 % Ni, 0.4 % Mo) |
| <b>Coating Type</b>    | Cellulosic covering              |

### Typical Tensile Properties

| Condition  | Yield Strength     | Tensile Strength    | Elongation |
|------------|--------------------|---------------------|------------|
| <b>AWS</b> |                    |                     |            |
| As Welded  | 620 MPa ( 90 ksi ) | 700 MPa ( 102 ksi ) | 22 %       |

### Typical Charpy V-Notch Properties

| Condition  | Testing Temperature | Impact Value      |
|------------|---------------------|-------------------|
| <b>AWS</b> |                     |                   |
| As Welded  | -30 °C ( -22 °F )   | 35 J ( 26 ft-lb ) |
| As Welded  | -20 °C ( -4 °F )    | 60 J ( 44 ft-lb ) |

### Typical Weld Metal Analysis %

| C    | Mn   | Si   | Ni   | Mo   |
|------|------|------|------|------|
| 0.10 | 1.00 | 0.20 | 0.90 | 0.40 |

### Deposition Data

| Diameter                               | Current   | Voltage | Deposition Efficiency (%) | Burn-off Time /Electrode | Deposition Rate @ 90% I max |
|----------------------------------------|-----------|---------|---------------------------|--------------------------|-----------------------------|
| 3.2 x 350.0 mm<br>( 1/8 x 13.8 in. )   | 65-120 A  | 32 V    | 63 %                      | 79 sec                   | 0.82 kg/h<br>( 1.8 lbs/h )  |
| 4.0 x 350.0 mm<br>( 5/32 x 13.8 in. )  | 90-180 A  | 34 V    | 63 %                      | 78 sec                   | 1.17 kg/h<br>( 2.6 lbs/h )  |
| 5.0 x 350.0 mm<br>( 0.197 x 13.8 in. ) | 150-240 A | 32 V    | 63 %                      | 90 sec                   | 1.67 kg/h<br>( 3.7 lbs/h )  |