

# Sureweld 10P Plus

Sureweld 10P Plus is a modified version of the standard 10P electrode and can be differentiated by its gray coating. It has also been developed for the pipe welding industry but has a more consistent burn-off and a more forgiving arc burn. This provides a better bead profile and sidewall fusion with lower spatter. Sureweld 10P Plus will maintain the proper keyhole in an open root and will produce X-ray quality joints in the flat, horizontal, overhead, vertical-up, and vertical-down procedures. Sureweld 10P Plus is recommended for welding API grades A25, A, B and X42 pipe and general structural, ship, barge and storage tank fabrication. It may also be used for welding root passes in higher grade pipe in some circumstances.

<b>Classifications:</b>	AWS A5.1:E6010, ASME SFA 5.1
<b>Approvals:</b>	CWB CSA W48, ABS AWS A5.1: E6010
<b>Industry or Segmentation:</b>	Pipeline, Industrial and General Fabrication, Civil Construction

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

## Typical Tensile Properties

Condition	Yield Strength	Tensile Strength	Elongation
As Welded	503 MPa (72.9 ksi)	599 MPa (86.9 ksi)	25 %

## Typical Charpy V-Notch Properties

Condition	Testing Temperature	Impact Value
As Welded	-29 °C (-20 °F)	45 J (33 ft-lb)

## Typical Weld Metal Analysis %

C	Mn	Si	S	P
0.15	0.60	0.20	0.01	0.01

## Deposition Data

Diameter	Optimal Amps	Amps	Deposition Rate	Efficiency (%)
2.4 mm (3/32 in.)	75 A	40-75 A	0.7 kg/h (1.5 lb/h)	72 %
3.2 mm (1/8 in.)	100 A	80-140 A	0.9 kg/h (2.1 lb/h)	76.3 %
3.2 mm (1/8 in.)	130 A	80-140 A	1 kg/h (2.3 lb/h)	68.8 %
4.0 mm (5/32 in.)	140 A	130-175 A	1.3 kg/h (2.8 lb/h)	73.6 %
4.0 mm (5/32 in.)	170 A	130-175 A	1.3 kg/h (2.9 lb/h)	64.1 %
4.8 mm (3/16 in.)	160 A	150-210 A	1.5 kg/h (3.3 lb/h)	74.9 %
4.8 mm (3/16 in.)	190 A	150-210 A	1.6 kg/h (3.5 lb/h)	69.7 %