



# Shielded Metal Arc Welding (SMAW – Stick)

For high strength alloy and problem steels. Also for Cor-Ten wear resistant and nickel bearing steels.

#### Features

- Excellent Strength 95,000psi
- Moisture Proof, Low Hydrogen
- X-Ray Quality Welds
- Outstanding Ductility (33% Elongation)
- Excellent Sub-Zero Properties

- Highest Impact Resistance
- Crack-Free Results
- Easy To Use All Positions
- Welds "Tramp" Steels
- Charpy At -20°F 82ft/lbs

#### Characteristics

**Polaris A** avoids the moisture problems encountered with conventional low hydrogen electrodes. The exceptional elongation of **Polaris A** makes it ideal for applications involving impact or vibration. **Polaris A** produces sound, heat-treatable welds even on sulfur or caustic contaminated steels. Welds have extraordinary strength and ductility even at sub-zero temperatures. Deposits are easy to apply in all positions and are free machining.

Applications include all construction equipment, boilers, tanks, piping, truck and bus frames, and all crack sensitive steels. **Polaris A** provides a good pad for hard surfacing due to its extraordinary ductility

### Technical

Size and Amps AC/DC ±20%

Inches	3/32	1/8	5/32	3/16
(mm)	(2.4)	(3.2)	(4.0)	(4.8)
Amps	85	120	160	220

With DC use reverse polarity. (DCEP)

## Application

- Clean and bevel as required.
- Preheat heavy sections.
- Use a close arc length.
- For vertical welds, lower amperage, weld from bottom up and weave, do not whip.
- Overhead and horizontal use stringer beads.
- Down hand maximum weave: 2–1/2 times electrode diameter.