

# Technical Data Sheet

## 6013 Coated Electrode



### Overview

6013 high titania coated electrodes produce weld deposits that are much smoother and flatter than those produced by 6012. This electrode was primarily designed to provide good wetting and shallow penetration for thin sheet metal applications (using smaller diameter electrodes), but with sufficient penetration for welding medium gauge steel. As a result, 6013 is an all-purpose electrode that provides a soft, steady arc that is easily regenerated, easy slag control for vertical-down welding, low spatter and a beautiful bead appearance. 6013 electrodes may be used in any position with AC or DC (straight or reverse polarity).

### Features/Benefits

- Runs on all polarities AC and DC
- Excellent out-of-position
- Can be run holding an arc or in the drag mode
- Easy slag release
- Operates well on low open circuit machines
- Excellent for filling holes and bridging gaps

### Applications

- Galvanized steels
- Sheet metal
- Pipe and tubing
- All mild steels
- Tanks and container frames
- Truck bodies

### Method of Application

AC/DC arc welder

### Identification

Printed electrode

### Directions for Use

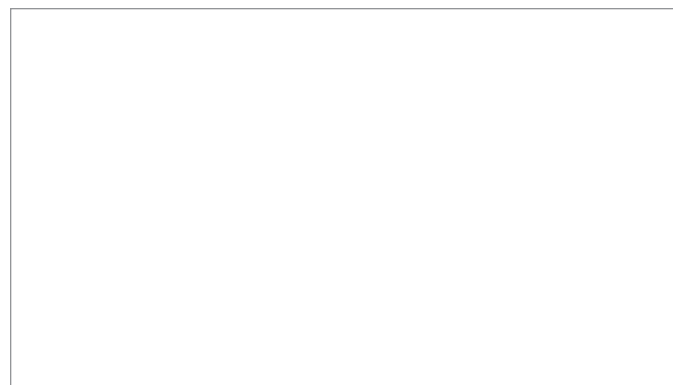
Set welder for AC, DC reverse or DC straight polarity. For thin metals, DC straight polarity is recommended. Operate by holding a short arc or using the drag technique. Weld using stringer or weave beads. Remove slag after each pass.

### Typical Welding Procedures

#### DCEP

Diameter	Amps (Flat)
3/32"	50 – 100
1/8"	80 – 130
5/32"	130 – 180
3/16"	180 – 230

*Procedures may vary with change in position, base metals, filler metals, equipment and other changes.*





**Technical Specifications**

ANSI/AWS A5.1: E6013  
ASME SFA 5.1: E6013

**Typical Weld  
Metal Properties**

**AWS values are minimum**

	<b>AWS Spec.</b>	<b>Weld Metal</b>
Tensile Strength (PSI)	60, 000	70, 000
Yield Strength (PSI)	48, 000	63, 000
Elongation	17%	29.7%
Charpy V-notch at -20°F	N/A	58 ft./lbs.