



WASHINGTON ALLOY'S Quality Management System is certified to **ISO 9001:2008**  
Cert# 05-R0925

# USA E6013

## CARBON STEEL WELDING ELECTRODE

U.S. ALLOY CO.  
dba Washington Alloy  
7010-G Reames Rd.  
Charlotte, NC 28216  
[www.weldingwire.com](http://www.weldingwire.com)



**American Welding Society**  
Sustaining Company Member



### ALLOY DESCRIPTION AND APPLICATION:

**USA E6013** is a shallow penetrating flux covered welding electrode designed to produce a smooth flat bead on sheet metal and thin to medium gauge materials. The easy re-strike of E6013 makes it a great choice for detail work in tight places where a positive, precision ignition is required. The soft arc, easy slag removal and the low spatter give the E6013 a beautiful weld deposit that can even be welded vertical down. This is an All-position rod that will weld with both AC and DC current and is typically used auto bodies, storage tanks, machinery guards, metal furniture, gates, ornamental iron or wherever appearance is important or desirable.

### TYPICAL WELDING PARAMETERS:

AC or DC-/+ Electrode Positive or Negative

Amperage settings:

Dia.	Flat & Horizontal fillet	Vertical & overhead
1/16	25-50	25-50
5/64	35-60	35-60
3/32	50-100	50-90
1/8	80-130	60-110
5/32	140-180	110-160
3/16	180-230	120-160
1/4	260-320	

### TYPICAL CHEMISTRY (%) & WELD METAL PROPERTIES

C - 0.070	Yield point (psi) .....	63,000
Mn - 0.450	Tensile Strength (psi) .....	70,000
Si - 0.320	Elongation in 2" (%) .....	29
P - 0.014	Charpy V-notch @ 32 F (ft. lbs)	58
S - 0.008		

### SPECIFICATIONS:

AWS A5.1 Class E6013

### AVAILABLE SIZES:

1/16, 5/64, 3/32, 1/8, 5/32, 3/16, 1/4 in 10 or 5lb packs

**EAST COAST**  
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