

# EXCALIBUR®312-16

Stainless • AWS E312-16



## KEY FEATURES

- Can be used for joining hard to weld materials and dissimilar metals
- Applications should be limited to 800°F (420°C)
- The weld deposits exhibit high tensile strength and offer some resistance to abrasion
- Weld deposits work-hardens and allows for good wear resistance

## CONFORMANCES

<b>AWS A5.4/A5.4M: 2006:</b>	E312-16
<b>ASME SFA A5.4:</b>	E312-16

## TYPICAL APPLICATIONS

- Tool Steels
- Hard to Weld Steels
- Cast and Wrought Alloys
- Dissimilar Metals

## WELDING POSITIONS

All, except vertical down

## DIAMETERS / PACKAGING

Diameter		Length		10 lb (4.5 kg) Easy Open Can	
in	(mm)	in	(mm)	30 lb (13.6 kg) Master Carton	
1/8	(3.2)	14	(355)	ED034996	
5/32	(4.0)	14	(355)	ED034997	
3/16	(4.8)	14	(355)	ED034998	

## DEPOSIT COMPOSITION(1) - As Required per AWS A5.4/A5.4M: 2012

	%C	%Cr	%Ni	%Mo	%Mn
<b>Requirements</b>					
AWS E312-16	0.15 max	28.0 - 32.0	8.0 - 10.5	0.75 max	0.5 - 2.5
<b>Typical Results(2)</b>	0.12	29.4	9.4	0.15	1.4
	%Si	%P	%S	%Cu	FN
<b>Requirements</b>					
AWS E312-16	1.00 max	0.04 max	0.03 max	0.75 max	Not Required
<b>Typical Results(2)</b>	0.57	0.02	0.01	0.06	30 - 60

## TYPICAL OPERATING PROCEDURES

	Current (Amps)			
Polarity	3/32 in (2.4 mm)	1/8 in (3.2 mm)	5/32 in (4.0 mm)	3/16 in (4.8 mm)
E312-16				
DC+/AC	40 - 80	75-110	95 - 150	130 - 200