



347 AC-DC

AWS E347-16

REPLACES: 020501

160-K, INDEX: 060215

DESCRIPTION:

Excellent for welding 347 and 321 steels, **347 AC-DC** provides good corrosion resistance in steam or utility applications up to 1400°F- better corrosion resistance than Type 308 electrodes. Offering an outstanding weld from all positions, 347 AC-DC is also specially formulated with columbium to prevent carbide precipitation. It has a smooth running arc that results in a uniform bead that is flat to slightly convex.

Note: Actual certs are included in every master carton of stainless stick electrodes at no charge.

FEATURES	BENEFITS
<ul style="list-style-type: none"> • Easy slag release • Easy strike and re-strike • Extremely high moisture resistance • All-position 	<ul style="list-style-type: none"> • Less chance of slag inclusions • Easy to use, less chance of starting defects • Extends shelf life of product in open environments • Welds extremely well in flat, horizontal, vertical (up) and overhead positions
<ul style="list-style-type: none"> • Directional arc • Electrode doesn't overheat • Spray-like arc transfer 	<ul style="list-style-type: none"> • Metal goes where directed • Less stub loss, cost-effective • Low spatter and less clean-up

TYPICAL WELD METAL PROPERTIES* (CHEM PAD):

WELD METAL ANALYSIS		AWS Spec
Carbon (C)	0.06	0.08 max
Manganese (Mn)	1.19	0.5 to 2.5
Phosphorus (P)	0.026	0.04 max
Sulphur (S)	0.025	0.03 max
Silicon (Si)	0.46	0.90 max
Copper (Cu)	0.10	0.75 max
Chromium (Cr)	20.24	18.0 to 21.0
Nickel (Ni)	10.00	9.0 to 11.0
Molybdenum (Mo)	0.09	0.75 max
Columbium (Cb)	0.60	8.0 x % carbon minimum to 1.00 max

TYPICAL MECHANICAL PROPERTIES*(AS WELDED):

		AWS Spec
Tensile Strength	96,000 psi (662 MPa)	75,000 psi
Yield Strength	64,000 psi (442 MPa)	not required
Elongation % in 2"	36%	30%
DeLong Ferrite Number Range	4-10	not required
Schaeffler Number Range	4-10	not required
WRC Number Range (1992)	4-10	not required

CONFORMANCES AND APPROVALS:

- AWS Spec A5.4, Class E347-16 • ASME SFA5.4

*The information contained or otherwise referenced herein is presented only as "typical" without guarantee or warranty, and McKay expressly disclaims any liability incurred from any reliance thereon. Typical data are obtained when welded and tested in accordance with AWS A5.4 specification. Other tests and procedures may produce different results. No data is to be construed as a recommendation for any welding condition or technique not controlled by McKay.



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RECOMMENDED WELDING PROCEDURES:

- GENERAL:** DCEP (electrode positive, work negative) or AC
- ARC LENGTH:** Short (less than half the diameter of the electrode)
- FLAT & HORIZONTAL:** Angle electrode 10°-15° from 90°
- VERTICAL-UP:** Use weaving techniques. Reduced amperage compared to flat position setting
- OVERHEAD:** Use slight weaving motion within the puddle
- STORAGE:** AC-DC electrodes have a high degree of moisture resistance; however, for critical applications, the electrode should be held at 225°F after opening
- RECONDITIONING:** If exposed to atmosphere for extended periods, recondition at 500°F for one (1) hour

RECOMMENDED OPERATING PARAMETERS:

Diameter		Type of Power	FLAT & HORIZONTAL		
Inches	mm		Minimum Amps	Optimum Amps	Maximum Amps
3/32	2.4	DCEP or AC	45	65	80
1/8	3.2	DCEP or AC	55	105	120
5/32	4.0	DCEP or AC	65	140	170
3/16	4.8	DCEP or AC	160	170	205

AVAILABLE DIAMETERS AND PACKAGES:

Diameter		Length		6-lb. Can	10-lb. Can
Inches	mm	Inches	mm		
3/32	2.4	10	254	S483130-032	—
1/8	3.2	14	355	—	S483144-033
5/32	4.0	14	355	—	S483151-033
3/16	4.8	14	355	—	S483158-033

Material Safety Data Sheets on any McKay product may be obtained from McKay Customer Service.

Because McKay is constantly improving products, McKay reserves the right to change design and/or specifications without notice.