

**MIDALLOY MASTERCOR™ E347T1-1/4 / E347HT1-1/4 A/P FLUX-CORED WIRE**

**CLASSIFICATION**

- AWS 5.22 Class E347T1-1, E347HT1-1, E347T1-4, and E347HT1-4 / ASME SFA 5.22 Class E347T1-1, E347HT1-1, E347T1-4, and E347HT1-4. This product can be run with 100% CO2 shielding gas or 75% Argon 25% / CO2 mixed gas.
- UNS W34731 A#8 F#6

**DESCRIPTION**

- Midalloy Mastercor™ E347T1-1/4 and E347HT1-1/4 AP are all-position flux-cored wires used to weld 347 and 321 stainless. Midalloy Mastercor E347T1-1/4 and E347HT1-1/4 AP have excellent slag removal and runs with a spatter free globular transfer. The weld deposit has 5-15% ferrite. Niobium (Cb) is used as the stabilized element for this austenitic stainless steel flux-cored wire.

**APPLICATIONS**

- Typical applications include welding, repairing, and overlaying of stabilized grades of stainless steel such as type 347 and type 321.
- Midalloy Mastercor™ E347T1-1/4 and E347HT1-1/4 AP is used in the refinery industry to combat high temperature erosion, corrosion, and fatigue.
- Other welding applications include valves, valve seating surfaces, gears, propeller shafts, and impellers.
- Normally E347 is normally used to weld AISI 321 since Titanium will not transfer across the arc.

**TYPICAL CHEMISTRY**

C	Mn	Si	Cr	Ni	Mo	Cu	Nb (Cb)*	S	P	N
0.06	1.84	.63	20.2	10.35	0.2	0.20	0.68	0.02	0.03	0.05

\* Nb (Cb) is 8 times the Carbon content to a maximum of 1.0%.

**FERRITE CONTENT** 5 to 15 FN per WRC92

**TYPICAL MECHANICAL PROPERTIES\***

<b>TENSILE STRENGTH</b>	88,000 PSI
<b>YIELD STRENGTH</b>	55,000 PSI
<b>ELONGATION IN 2"</b>	40%

**Toughness** 35 FT. LBS. @ 32°F

**WELDING PARAMETERS (WITH CO2 SHIELDING GAS)**

DIAMETER	VOLTAGE	AMPERAGE (WIRE FEED SPEED ipm)	
		FLAT	VERTICAL & OVERHEAD
.045"	24-28	130-200 (250 to 425)	120-160 (225 to 300)
1/16"	25-30	180-250 (150 to 250)	180-220 (150 to 200)

NOTE: IF USING MIXED GAS, VOLTAGE CAN BE INCREASED BY 2 VOLTS.

**STANDARD PACKAGING**

- .045" 33 lb. Spool
- 1/16" 33 lb. Spool

8/5/11

*The contents of this publication are presented for informational purposes only, and while every effort has been made to ensure their accuracy, they are not to be construed as warranties or guarantees, express or implied, regarding the products or services described herein or their use or applicability. We reserve the right to modify or improve the designs or specifications of such products at any time without notice.*

Office and Corporate Warehouse  
 630 Axminister Drive  
 St. Louis, MO 63026 • 636-349-6000 • 800-776-3300  
 Fax 636-349-2240

