

**MIDALLOY MASTERCOR™ E316T1-1/4 / E316HT1-1/4 AP FLUX-CORED WIRE**

**CLASSIFICATION**

- AWS 5.22 Class E316T1-1, E316HT1-1, E316T1-4, and E316HT1-4 / ASME SFA 5.22 Class E316T1-1, E316HT1-1, E316T1-4, and E316HT1-4 flux-cored wire.
- UNS# W31631 A#8 F#6

**DESCRIPTION**

- MIDALLOY Mastercor™ E316T1-1/4 and E316HT1-1/4 are gas shielded flux-cored wires designed for all position welding and can be used with 75% Argon / 25% CO<sub>2</sub> or 100% CO<sub>2</sub> shielding gas.

**APPLICATIONS**

- MIDALLOY Mastercor™ E316T1-1/4 and E316HT1-1/4 are used for welding similar alloys (about 2% Molybdenum).
- This product has been used successfully in applications involving special alloys for high-temperature service.
- The presence of Molybdenum provides increased creep resistance at elevated temperatures and pitting resistance in a halide environment.
- Also used for welding type 316H base material.
- Higher Carbon (.04% - .08%) provides higher tensile and creep strength at elevated temperatures.

**TYPICAL CHEMISTRY (%)**

C	Mn	Si	Cr	Ni	Mo	P	S	Cu	N
0.06	1.10	.85	18.5	12.06	2.50	0.03	0.02	0.05	0.05

Controlled Ferrite WRC 92: 4-10 FN

**TYPICAL MECHANICAL PROPERTIES\***

TENSILE STRENGTH	83,500 PSI
YIELD STRENGTH	63,000 PSI
ELONGATION IN 2"	39%

Note: Mechanical properties shown using 100% CO<sub>2</sub> shielding gas

**OPTIMUM TYPICAL WELDING PARAMETERS (using 100% CO<sub>2</sub> shielding gas)**

DIAMETER	AMPERAGE	VOLTAGE	WFS (IPM)	STICK/OUT
.045"	160-200	26-28	300-425	5/8" – 3/4"
1/16"	215-250	27-28	190-240	3/4" - 1"

Note: Lower by 2 volts when using 75AR / 25CO<sub>2</sub>

**STANDARD PACKAGING**

- 33 lb. spool

8/4/11

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