



110T1-K3M FLUX CORED Welding Wire

U.S. ALLOY CO.
dba Washington Alloy
7010-G Reames Rd.
Charlotte, NC 28216
www.weldingwire.com

Quality Management System
in accordance with
ISO 9001:
Cert # 05-R0925



ALLOY DESCRIPTION AND APPLICATION:

110T1-K3 is a flux cored wire designed for single or multi pass using Argon /CO₂ shielding gas welding having a smooth spray-type transfer commonly used on low alloy steels in the flat and horizontal position. This wire normally used in high strength applications which will produce a chemical composition of 1.5 % nickel and 0.5 % molybdenum yielding strengths ranging from 80-110 ksi. Steels commonly welded with this grade would include HY-80, HY-100, ASTM A710, ASTM A514 and similar grades such as offshore & earthmoving equipment.

TYPICAL FCAW WELDING PROCEDURES; DCEP with 75/25 (35-45cfh)

Wire Diameter	Wire Speed (ipm)	Amps	Volts	Electrical Stickout
0.045"	270-500	160-300	25-31	1/2-1"
0.052"	280-500	145-350	24-30	1/2-1"
1/16"	200-400	275-375	27-32	3/4-1 1/4"

Procedures may vary with change in position, base metals, filler metals, equipment and other changes.

TYPICAL UNDILUTED WELD METAL (%) AND WELD METAL PROPERTIES;

	AWS Spec.	U.S. ALLOY 110T5-K4		AWS Spec	Typical
Carbon	0.15 max.	0.05	Tensile Strength (psi)	100-120,000	115,200
Manganese	0.75-2.25	1.73	Yield Strength (psi)	88,000 min.	104,500
Nickel	1.25-2.60	1.93	Elongation in 2"	16% min.	18.9%
Chromium	0.15 max.	0.06	Charpy V-notch (0°F)	20 ft·lbs min	37 ft·lbs
Silicon	0.80 max.	0.36			
Molybdenum	0.25-0.65	0.41			
Phosphorus	0.03 max.	0.011			
Sulfur	0.03 max.	0.012			
Vanadium	0.05 max.	0.02			

AVAILABLE SIZES: TCF 110T1-K3= Spools of .045
Other sizes may be available – please inquire

SPECIFICATIONS; ANSI/AWS A5.29 E110T1-K3M
ASME SFA A5.29 E110T1-K3C



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