



WASHINGTON ALLOY'S Quality Management System is Certified to ISO 9001:2008 Cert # 05-R0925

# 110C-G METAL CORED Welding Wire

U.S. ALLOY CO.  
dba Washington Alloy  
7010-G Reames Rd.  
Charlotte, NC 28216  
[www.weldingwire.com](http://www.weldingwire.com)



## ALLOY DESCRIPTION AND APPLICATION:

110C-G is a metal cored electrode designed for single and multiple pass welding using 98% Argon /2% O<sub>2</sub> or 75% Argon /25% CO<sub>2</sub> shielding gas welding having a smooth spray-arc transfer commonly used of carbon and low alloy steels, in the flat and horizontal positions, where a minimum tensile strength of 110,000 psi is required in the deposited weld metal. This wire normally used in high strength applications which will produce a chemical composition of 2 % nickel and 0.5 % molybdenum yielding strengths ranging from 80-110 ksi. Steels commonly welded with this grade would include HY-80, ASTM A710, ASTM A514 and similar grades. Metal cored 110 will exhibit superb deposition rates, weld appeal with very little spatter.

## TYPICAL FCAW WELDING PROCEDURES; DCEP with 98% Argon /2% O<sub>2</sub> (35-50 cfh)

Wire Diameter	Wire Speed (ipm)	Amps	Volts	Electrical Stickout
0.045"	240- <b>420</b> -580	180- <b>250</b> -325	23- <b>26</b> -28	1/2-1"
0.052"	225- <b>350</b> -620	215- <b>310</b> -465	24- <b>27</b> -30	1/2-1"
1/16"	165- <b>310</b> -485	225- <b>370</b> -525	23- <b>27</b> -31	3/4-1.25 "

Procedures may vary with change in position, base metals, filler metals, equipment and other changes. **(Based on optimum FLAT)**

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

### U.S. ALLOY 110C-G

			AWS Spec	Typical
Carbon	0.04			
Manganese	1.75	Tensile Strength (psi)	110,000	115,500
Nickel	2.05	Yield Strength (psi)	N/A	106,500
Silicon	0.42	Elongation in 2"	N/A	16%
Chromium	0.19	Charpy V-notch (-20°F)	N/A	42 ft·lbs
Molybdenum	0.54	(-60°F)		28 ft·lbs
Phosphorus	0.011			
Sulfur	0.011			

**AVAILABLE SIZES:** TCF 110C-G = Spools of .045

Other sizes may be available – please inquire

**SPECIFICATIONS;** ANSI/AWS A5.28 E110C-G  
ASME SFA A5.28 E110C-G

<b>EAST COAST</b>	<b>GULF COAST</b>	<b>WEST COAST</b>
7010-G Reames Rd	4755 Alpine Drive #100A	8535 Utica Ave
Charlotte, NC 28216	Stafford, TX 77477	Rancho Cucamonga, CA 91730
Tel (888) 522-8296	Tel (877) 711-9274	Tel (800) 830-9033
Fax (704) 598-6673	Fax (281) 313-6332	Fax (909) 291-4586



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Warehouse Distribution Center – Dayton, Ohio

Head Office – Puyallup, Washington

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