



CERTIFICATE of Compliance

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

Quality Management System
in accordance with
ISO 9001:2000
Cert # 05-R0925

TRADE NAME: USA 6013
Specification: AWS A 5.1 : ASME SFA 5.1
Classification: E6013

Chemical Composition for Weld Metal

	AWS Requirements	Typical
Carbon (C)	0.20 max.	0.07
Manganese (Mn)	1.20 max.	0.45
Silicon (Si)	1.00 max.	0.32
Phosphorus (P)	Not Specified	0.014
Sulfur (S)	Not Specified	0.008
Nickel (Ni)	0.30 max.	
Chromium (Cr)	0.20 max.	
Molybdenum (Mo)	0.30 max.	
Vanadium (V)	0.08 max.	
Mn + Ni + Cr + Mo + V	Not Specified	

Mechanical Properties for Weld Metal

	Minimum AWS Requirements	Typical
Tensile Strength	60,000 psi	70,000 psi
Yield Strength	48,000 psi	63,000 psi
Elongation in 2"	17 %	29.7 %
Charpy V-notch Impact Average	Not Specified	58 ft · lbs at 32°F

This certification is provided by Washington Alloy Co. with the expressed understanding that if the product supplied fails to conform the stated specifications, there shall be no personal liability of any kind on the undersigned and the obligation and liability of Washington Alloy Co., with respect to such non-conformance or specification failure, shall be limited to a) an obligation to furnish the purchaser, at no additional charge, material that meets the specifications and conformances or b) to refund to the purchaser the full amount of money paid to Washington Alloy Co. for the return of the product in full. In no event shall Washington Alloy Co. be liable for consequential damage.

This certifies that the product supplied will meet the requirements of the noted classification and data above. Products supplied in accordance to the Quality Management System of Washington Alloy Company.

Janney Gedding

Certification Administrator

EAST COAST
7010-G Reames Rd
Charlotte, NC 28216
Tel (888) 522-8296
Fax (704)598-6673

WEST COAST
8535 Utica Ave
Rancho Cucamonga, CA 91730
Tel(800)830-9033
Fax (909)291-4586



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