



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 70S-2
Specification: AWS A 5.18 : ASME SFA 5.18
Classification: ER70S-2

Chemical Composition % for Weld Wire

	AWS Requirements	Typical ¹
Carbon (C)	0.07 max.	0.05
Manganese (Mn)	0.90-1.40	1.25
Silicon (Si)	0.40-0.70	0.50
Phosphorus (P)	0.025 max.	0.012
Sulfur (S)	0.035 max.	0.012
Aluminum (Al)	0.05-0.15	0.10
Zirconium (Zr)	0.02-0.12	0.09
Titanium (Ti)	0.05-0.15	0.10
Nickel (Ni)	0.15 max.	
Molybdenum (Mo)	0.15 max.	
Copper (Cu)	0.50 max.	
Chromium (Cr)	0.15 max.	
Vanadium (V)	0.03 max.	

Mechanical Properties

	Minimum AWS Requirements	Typical ¹
Tensile Strength	70,000 psi	83,000 psi
Yield Strength	58,000 psi	71,000 psi
Elongation in 2"	22 %	27.5%
Charpy V-notch Impact Average	20 ft · lbs at -20°F	30 ft · lbs at -20°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.

¹Typical Results based on 100% CO₂


Certification Administrator

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

GULF COAST
4855 Alpine Drive #190
Stafford, TX 77477
Tel (877) 711-9274
Fax (281)313-6332

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



Print Date : 6/14/2008

Warehouse Distribution Center – Dayton, Ohio

Head Office – Puyallup, Washington

Washington Alloy Company believes that all information and data given is correct. Use this information to assist in making your own evaluations or decisions and this information should not be mistaken as an expressed or implied warranty. U.S. ALLOY CO. assumes no liability for results or damages incurred from the use of any information contained herein, in whole or in part.