



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

USA 12018M Coated Electrode

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



ALLOY DESCRIPTION AND APPLICATION;

USA 12018M is an all-position, low-hydrogen iron powder electrode containing manganese, chromium, nickel and molybdenum. USA 12018M was developed for welding high strength steels requiring a weld deposit tensile strength of 120,000 psi minimum. The weld deposits of USA 12018M have excellent impact properties and are X-ray quality. USA 12018M is designed for welding high tensile strength steels such as ASTM A148 Gr. 120-95, A238 Gr.F, A291 class 4, A514 and many other specifications all requiring a weld deposit tensile strength of 120,000 psi minimum.

TYPICAL WELDING PROCEDURES; DCEP & AC

Diameter	Amps (Flat)	Amps (Vertical & Overhead)
3/32"	55-100	50-80
1/8"	90-150	80-120
5/32"	140-210	110-150
3/16"	180-270	130-190
1/4"	250-350	

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

TYPICAL WELD METAL CHEMISTRY (%) & PROPERTIES

Carbon	0.08		
Manganese	1.46	Elongation in 2"(%)	20%
Silicon	0.30	Yield Strength (psi)	117,000
Chromium	0.98	Tensile Strength (psi)	138,000
Nickel	1.86	Charpy V-notch at -60°F	36 ft-lbs
Molybdenum	0.41		

AVAILABLE SIZES: TE 12018M = 3/32", 1/8", 5/32", 5/32"
Other sizes available – please inquire

SPECIFICATIONS; ANSI/AWS A5.5 E12018M
ASME SFA 5.5 E12018M

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

GULF COAST
4755 Alpine Drive #100A
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



11-2011 DC

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.