



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

7018 H4R Coated Electrode

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



ALLOY DESCRIPTION AND APPLICATION;

E7018HR aka E7018 H4R are low hydrogen mild steel electrodes recommended when controlled diffusible hydrogen levels are needed with and also a low-moisture-absorbing coating [moisture resistant]. These rods are formulated to have x-ray quality welds with easy slag removal, excellent welder appeal in any position with both AC and DC+ polarity even on those poor weldable steels. Welding of piping, cold rolled steels, bridges, shipbuilding, boiler and pressure applications, power plants and many other fabrications projects.

TYPICAL WELDING PROCEDURES; DCEP & AC

Diameter	Amps (Flat)	Volts
3/32"	60-100	23-27
1/8"	90-150	24-28
5/32"	130-200	25-31

Use a short arc – dragging with 10-15% from 90°

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

TYPICAL WELD METAL CHEMISTRY (%) & PROPERTIES (AWS values are maximum)

	AWS Spec.	Weld metal		AWS Spec.	Weld metal
Carbon	0.15	0.065	Chromium	0.20	0.025
Manganese	1.60	0.941	Molybdenum	0.30	0.008
Silicon	0.75	0.526	Vanadium	0.08	0.018
Phosphorus	0.035	0.015	Elongation in 2" (%)	22%	26.8%
Sulphur	0.035	0.007	Yield Strength (ksi)	58	71,276
Nickel	0.30	0.018	Tensile Strength (ksi)	70	85,524
Mn + Ni + Cr + Mo + V	1.75	1.010	Charpy V-notch at -20°F	20 ft·lbs min.	43.38 ft·lbs

H4 = Diffusible Hydrogen Requirement <4.0 ml Results 3/32" = 3.78 ml, 1/8" = 3.89 ml, 5/32" = 3.89 ml
R = Absorbed Moisture Test Requirements exceeding exposure of 80°F[27°C] and 80% relative humidity > 9 hours

AVAILABLE SIZES: TE 7018H4R = 3/32", 1/8", 5/32"

SPECIFICATIONS; ANSI/AWS A5.1 E7018 H4R
ASME SFA 5.1 E7018 H4R

EAST COAST	GULF COAST	WEST COAST
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



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 .