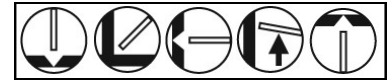


# Fabshield® XLR-8™



AWS A5.20: E71T-8JD H8  
 EN ISO 17632-A: T42 2 Y NO 2 H10  
 AWS A5.36: E71T8-A4-CS3-DH8

### WELDING POSITIONS:



### FEATURES:

- Welds out of position at high currents
- Low hydrogen weld deposit
- Excellent slag removal
- No shielding gas required
- High impact strength at low temperatures
- Excellent mechanical properties within a wide range of heat inputs

### BENEFITS:

- Increases productivity
- Provides increased resistance to cracking, promotes X-ray quality welds
- Increases productivity, minimizes risk of slag entrapment
- Suitable for welding outdoors without sheltering
- Resists cracking in severe applications
- Usable under AWS D1.8 for use on Demand Critical welds

### APPLICATIONS:

- Structural steel erection
- Heavy equipment repair
- Non-alloyed and fine grain steels
- Ship and barge construction
- Bridge construction
- AWS D1.8 demand-critical applications

**SLAG SYSTEM:** Fast-freezing, basic-type, flux-cored wire

**SHIELDING GAS:** None required

**TYPE OF CURRENT:** Direct Current Electrode Negative (DCEN)

**Note:** Fabshield XLR-8 is intended to be used with constant-voltage (CV) power sources.

**STANDARD DIAMETERS:** 1/16" (1.6 mm), 0.072" (1.8 mm), 5/64" (2.0 mm)

**RE-DRYING:** Not recommended

**STORAGE:** Product should be stored in a dry, enclosed environment, and in its original intact packaging

### TYPICAL WELD METAL CHEMISTRY\* (Chem Pad):

Weld Metal Analysis %	Fabshield XLR-8	AWS Spec
Carbon (C)	0.19	0.30
Manganese (Mn)	0.51	1.75
Silicon (Si)	0.17	0.60
Phosphorus (P)	0.009	0.03
Sulphur (S)	0.006	0.03
Aluminum (Al)	0.51	1.80

### TYPICAL DIFFUSIBLE HYDROGEN\*:

Hydrogen Equipment	Fabshield XLR-8	AWS Spec
(GAS CHROMATOGRAPHY)	<6.7ml/100g	8.0ml/100g Maximum

**Note:** AWS specification single values are maximums.

### TYPICAL MECHANICAL PROPERTIES\* [Aged 48 Hrs. @ 200°F (93°C)]:

Mechanical Tests	Fabshield XLR-8	AWS Spec
Tensile Strength	84,000 psi (579 MPa)	70,000-95,000 psi (490-670 MPa)
Yield Strength	68,000 psi (469 MPa)	58,000 psi (390 MPa) Minimum
Elongation % in 2" (50 mm)	28%	22% Minimum

### D-DESIGNATOR TESTING PER AWS A5.20/A5.20M

Low Heat Input (Avg. 30 kJ/in)	High Heat Input (Avg. 80 kJ/in)
88,000 psi (607 MPa)	79,000 psi (545 MPa)
69,000 psi (476 MPa)	63,000 psi (434 MPa)
23%	28%

### TYPICAL CHARPY V-NOTCH IMPACT VALUES\* (As Welded):

CVN Temperatures	Fabshield XLR-8	AWS Spec
Avg. at 70°F (20°C)	Refer to D-Designator Table	40 ft •lbs (54 Joules) Minimum
Avg. at 0°F (-20°C)	Refer to D-Designator Table	Not specified
Avg. at -20°F (-30°C)	40 ft •lbs (54 Joules)	20 ft •lbs (27 Joules) Minimum
Avg. at -40°F (-40°C)	31 ft •lbs (42 Joules)	20 ft •lbs (27 Joules) Minimum "J" requirement

### D-DESIGNATOR TESTING PER AWS A5.20/A5.20M

Low Heat Input (Avg. 30 kJ/in)	High Heat Input (Avg. 80 kJ/in)
77 ft•lbs (104 Joules)	73 ft•lbs (99 Joules)
60 ft•lbs (81 Joules)	50 ft•lbs (68 Joules)
Not required	Not required
Not required	Not required

\*The information contained or otherwise referenced herein is presented only as "typical" without guarantee or warranty, and Hobart Brothers LLC expressly disclaims any liability incurred from any reliance thereon. Typical data are those obtained when welded and tested in accordance with the AWS A5.20 specification. Other tests and procedures may produce different results. No data is to be construed as a recommendation for any welding condition or technique not controlled by Hobart Brothers LLC.

# Fabshield® XLR-8™

Diameter Inches (mm)	Weld Position	Amps	Volts	Wire-Feed Speed		Deposition Rate		Contact Tip to Work Distance	
				in/min	(m/min)	lbs/hr	(kg/hr)	Inches	(mm)
1/16 (1.6)	All Position	180	18	145	(3.7)	3.3	(1.5)	1	(25)
1/16 (1.6)	All Position	210	21	187	(4.8)	4.7	(2.1)	1	(25)
1/16 (1.6)	All Position	230	22	210	(5.3)	5.5	(2.5)	1	(25)
1/16 (1.6)	All Position	255	23	250	(6.4)	6.3	(2.8)	1	(25)
1/16 (1.6)	Flat & Horizontal	265	22	275	(6.9)	7.3	(3.3)	1	(25)
1/16 (1.6)	Flat & Horizontal	275	23	315	(8.0)	8.1	(3.8)	1	(25)
0.072 (1.8)	All Position	170	18	100	(2.4)	3.2	(1.5)	1	(25)
0.072 (1.8)	All Position	230	22	160	(4.1)	5.9	(2.7)	1	(25)
0.072 (1.8)	All Position	245	22	170	(4.3)	6.3	(2.9)	1	(25)
0.072 (1.8)	All Position	265	22	200	(5.1)	7.5	(3.4)	1	(25)
0.072 (1.8)	Flat & Horizontal	315	23	280	(7.1)	10.7	(4.8)	1	(25)
5/64 (2.0)	All Position	200	18	100	(2.5)	4.0	(1.8)	1 1/4	(32)
5/64 (2.0)	All Position	230	18	125	(3.2)	5.1	(2.3)	1 1/4	(32)
5/64 (2.0)	All Position	255	22	160	(4.1)	6.5	(2.9)	1 1/4	(32)
5/64 (2.0)	All Position	280	23	200	(5.1)	8.2	(3.7)	1 1/4	(32)
5/64 (2.0)	Flat & Horizontal	340	24	280	(7.1)	11.2	(5.1)	1 1/4	(32)

- **Maintaining a proper welding procedure - including pre-heat and interpass temperatures - may be critical depending on the type and thickness of steel being welded.**
- **Fabshield XLR-8 is intended to be used with constant-voltage (CV) power sources.**
- **All positions include:** Flat, Horizontal, Vertical Up, and Overhead.

**STANDARD DIAMETERS AND PACKAGES:** For a complete list of diameters and packaging, please contact Hobart Brothers at (800) 424-1543, or (937) 332-5188 for International Customer Service.

Diameter Inches	mm	12-lb. (5.4kg)	20-lb. (9.1kg)	33-lb. (15kg)	50-lb. (22.7kg)
		Vacuum-Packed Spool	Vacuum-Packed Spool	Vacuum-Packed Spool	Coil
1/16	1.6	S225719-070	S225719-082	S225719-053	—
0.072	1.8	S225724-070	S225724-082	S225724-053	—
5/64	2.0	—	S225725-082	S225725-053	S225725-014

## CONFORMANCES AND APPROVALS:

- **AWS A5.20**, E71T-8JD H8
- **AWS A5.20M**, E491T-8JD H8
- **AWS A5.36**, E71T8-A4-CS3-DH8
- **ASME SFA 5.20**, E71T-8JD H8
- **ABS**, 3YSA H10
- **CWB**, E491T-8J-H8
- **DNV-GL**, II Y40 MS(H10) (1/16"-5/64")
- **EN ISO 17632-A**: T42 2 Y NO 2 H10
- **CE Marked** per CPR 305/2011
- **AWS D1.8/D1.8M**, 1/16" (1.6 mm) - 5/64" (2.0 mm) diameter electrodes

**TECHNICAL QUESTIONS?** For technical support of Hobart Filler Metals products, contact the Applications Engineering department by phone toll-free at 1-800-532-2618 or by e-mail at [Applications.Engineering@hobartbrothers.com](mailto:Applications.Engineering@hobartbrothers.com)

## CAUTION:

Consumers should be thoroughly familiar with the safety precautions on the warning label posted in each shipment and in the American National Standard Z49.1, "Safety in Welding and Cutting," published by the American Welding Society, 8669 NW 36th St., Miami, FL 33166 (can also be downloaded online at [www.aws.org](http://www.aws.org)); OSHA Safety and Health Standards 29 CFR 1910 is available from the U.S. Department of Labor, Washington, D.C. 20210

Safety Data Sheets on any Hobart Brothers LLC product may be obtained from Hobart Customer Service or at [www.hobartbrothers.com](http://www.hobartbrothers.com).

Because Hobart Brothers LLC is constantly improving products, Hobart reserves the right to change design and/or specifications without notice.

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**Revision Date:** 180703 (Replaces 171102)  
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