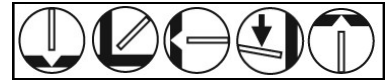


# Fabshield® 91T8



AWS A5.29: E91T8-G H8  
EN ISO 18276-A: T55 4 Z Z NO 1 H10

## WELDING POSITIONS:



### FEATURES:

- Excellent operator appeal
- Fast-freezing slag
- Good slag removal
- Excellent low temperature impact toughness

### BENEFITS:

- Increased productivity
- Excellent for all-position welding
- Reduces time spent cleaning weld beads
- Welds remain ductile at low temperatures

### APPLICATIONS:

- API 5L Grade X80

**SLAG SYSTEM OR WIRE TYPE:** Fast-freezing, basic-type, self-shielded flux cored wire

**SHIELDING GAS:** Not required

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

**STANDARD DIAMETERS:** 5/64" (2.0mm)

**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 %	Typical
Carbon (C)	0.04
Manganese (Mn)	1.25
Silicon (Si)	0.09
Sulphur (S)	0.008
Phosphorus (P)	0.006
Aluminum (Al)	1.05
Nickel (Ni)	3.60

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

### TYPICAL DIFFUSIBLE HYDROGEN\*:

Hydrogen Equipment	Typical
(GAS CHROMATOGRAPHY)	6.2 ml/100g

### TYPICAL MECHANICAL PROPERTIES\* [Aged 48 Hrs. @ 220°F (104°C)]:

Mechanical Tests	Typical	AWS Spec
Tensile Strength	99,200 psi (684 MPa)	90,000-110,000 psi (620-760 MPa)
Yield Strength	86,900 psi (599 MPa)	78,000 psi (540 MPa) Minimum
Elongation % in 2" (50 mm)	25%	17% Minimum

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

CVN Temperatures	Typical	API X80 48"	AWS Spec
Avg. at 0°F (-20°C)	122 ft•lbs (165 Joules)	—	Not required
Avg. at -20°F (-30°C)	108 ft•lbs (146 Joules)	109 ft•lbs (148 Joules)	Not required
Avg. at -40°F (-40°C)	86 ft•lbs (117 Joules)	—	Not required
Avg. at -60°F (-50°C)	—	77 ft•lbs (105 Joules)	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 AWS A5.29 and EN ISO 18276-A specifications. 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® 91T8

Diameter		Weld Position	Amps	Volts	Wire-Feed Speed		Deposition Rate		Contact Tip to Work Distance	
Inches	(mm)				in/min	(m/min)	lbs/hr	(kg/hr)	Inches	(mm)
5/64	(2.0)	All Position	180	18	62	(1.6)	2.9	(1.3)	1	(25)
5/64	(2.0)	All Position	200	18	72	(1.8)	3.2	(1.5)	1	(25)
5/64	(2.0)	All Position	225	19	86	(2.2)	4.0	(1.8)	1	(25)
5/64	(2.0)	Flat & Horizontal	250	20	100	(2.5)	4.8	(2.2)	1	(25)

- **Maintaining a proper welding procedure - including pre-heat and interpass temperatures - may be critical depending on the type and thickness of steel being welded.**
- **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		14-lb. (6.4kg) Vacuum Packed Spool
Inches	(mm)	
5/64	(2.0)	S229325-P01

#### CONFORMANCES AND APPROVALS:

- **AWS A5.29**, E91T8-G H8
- **AWS A5.29M**, E621T8-G H8
- **ASME SFA 5.29**, E91T8-G H8
- **EN ISO 18276-A**, T55 4 Z Z NO 1 H10, 5/64" (2.0mm) diameter electrode

**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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