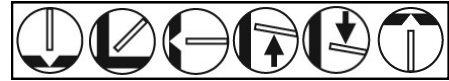


# Fabshield® X80



AWS A5.29: E81T8-Ni2J H8  
EN ISO 17632-A T46 4 2Ni Y NO 1 H10

## WELDING POSITIONS:



### FEATURES:

- Excellent operator appeal
- Fast-freezing slag
- Easy slag removal
- High impact strengths at low temperatures
- No shielding gas required
- Excellent mechanical properties

### BENEFITS:

- Increases productivity
- Suitable for all-position welding
- Reduces clean-up time, increases productivity
- Resists cracking in severe applications
- Suitable for welding outdoors
- Assists in producing high quality welds
- Excellent performance in vertical down position

### APPLICATIONS:

- API 5L Grade X80
- Piping
- Storage tanks
- Structural applications

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

**SHIELDING GAS:** None 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 PROPERTIES\* (Chem Pad):

Weld Metal Analysis	Fabshield X80	AWS Spec
Carbon (C)	0.04	0.12
Manganese (Mn)	1.37	1.50
Silicon (Si)	0.06	0.80
Sulphur (S)	0.002	0.03
Phosphorus (P)	0.011	0.03
Aluminum (Al)	0.93	1.80
Nickel (Ni)	2.38	1.75-2.75

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

### TYPICAL DIFFUSIBLE HYDROGEN\*:

Hydrogen Equipment	Fabshield X80	AWS Spec
(GAS CHROMATOGRAPHY)	7.3ml/100g	8.0ml/100g Maximum

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

Mechanical Tests	Fabshield X80	AWS Spec
Tensile Strength	94,000 psi (649 MPa)	80,000-100,000 psi (550-690 MPa)
Yield Strength	84,000 psi (578 MPa)	68,000 psi (470 MPa) Minimum
Elongation % in 2" (50 mm)	25%	19% Minimum

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

CVN Temperatures	Fabshield X80	AWS Spec
Avg. at -20°F (-30°C)	107 ft•lbs (138 Joules)	20 ft•lbs (27 Joules) Minimum
Avg. at -40°F (-40°C)	96 ft•lbs (134 Joules)	20 ft•lbs (27 Joules) Minimum "J" requirement

\*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 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® X80

Diameter Inches (mm)	Weld Position	Amps	Volts	Wire Feed Speed		Deposition Rate		CTWD	
				in/min	(m/min)	lbs/hr	(kg/hr)	Inches	(mm)
5/64" (2.0 mm)	All Position	180	18	62	(1.6)	2.9	(1.3)	1	(25)
5/64" (2.0 mm)	All Position	200	18	72	(1.8)	3.2	(1.5)	1	(25)
5/64" (2.0 mm)	All Position	225	19	86	(2.2)	4.0	(1.8)	1	(25)
5/64" (2.0 mm)	All Position	255	20.5	130	(3.3)	6.3	(2.8)	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, Vertical Down, 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)	14-lb. (6.4kg) Coil
5/64 (2.0)	S228825-P01

#### CONFORMANCES AND APPROVALS:

- **AWS A5.29**, E81T8-Ni2J H8
- **ASME SFA 5.29**, E81T8-Ni2J H8
- **AWS A5.29M**, E551T8-Ni2J H8
- **EN ISO 17632-A** T46 4 2Ni Y 1 H10
- **EN ISO 17632-A** T46 4 2Ni Y NO 1 H10
- **CE Marked** per CPR 305/2011

**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:** 220426 (Replaces 180710)

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