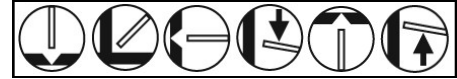


# Fabshield® 71K6



AWS A5.29: E71T8-K6J H8  
EN ISO: 17632-A T42 4 1Ni 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

### BENEFITS:

- Reduces fatigue and increases productivity
- Allows for all-position welding
- Reduces time spent cleaning weld beads
- Welds remain ductile at cold temperatures
- Great for outdoor welding

### APPLICATIONS:

- Offshore drilling rig
- Structural and general fabrication
- Ships
- Barges
- Construction
- Piping
- Transportation

**SLAG SYSTEM:** 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 PROPERTIES\*(Chem Pad):

Weld Metal Analysis (%)	Fabshield 71K6	AWS Spec
Carbon (C)	0.035	0.15
Manganese (Mn)	0.82	0.50-1.50
Silicon (Si)	0.07	0.80
Sulphur (S)	0.004	0.03
Phosphorus (P)	0.011	0.03
Aluminum (Al)	0.95	1.8
Nickel (Ni)	0.89	0.40-1.00
Chromium (Cr)	0.06	0.20
Molybdenum (Mo)	0.03	0.15
Vanadium (V)	0.004	0.05

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

### TYPICAL DIFFUSIBLE HYDROGEN\*:

Hydrogen Equipment	Fabshield 71K6	AWS Spec
(GAS CHROMATOGRAPHY)	6.0 ml/100g	8.0 ml/100g Maximum

### TYPICAL MECHANICAL PROPERTIES\*:

Mechanical Tests	Fabshield 71K6	AWS Spec
Tensile Strength	76,000 psi (522 MPa)	70,000-90,000 ksi (490-620 MPa)
Yield Strength	62,000 psi (425 MPa)	58,000 ksi (400 MPa) Minimum
Elongation % in 2" (50 mm)	29%	20% Minimum

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

CVN Temperatures	Fabshield 71K6	AWS Spec
Avg. at -40°F (-40°C)	295 ft•lbs (400 Joules)	20 ft•lbs (27 Joules) Minimum "J" requirements

\*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 A5.29 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<sup>®</sup> 71K6

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)	Flat & Horizontal	250	20	98	(2.5)	5.0	(2.2)	1	(25)
5/64	(2.0)	Flat & Horizontal	280	20	126	(3.2)	5.8	(2.6)	1	(25)
5/64	(2.0)	Overhead	180	18	63	(1.6)	2.7	(1.2)	1	(25)
5/64	(2.0)	Vertical Up	200	18	87	(2.2)	4.1	(1.8)	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		14-lb. (6.3kg) Coil
Inches	(mm)	
5/64	(2.0)	S228625-P01

#### CONFORMANCES AND APPROVALS:

- **AWS A5.29**, E71T8-K6J H8
- **AWS A5.29M**, E491T8-K6J H8
- **ASME SFA 5.29**, E71T8-K6J H8
- **ABS**, E71T8-K6J
- **EN ISO**, 17632-A T42 4 1Ni Y NO 1 H10
- **AS/NZS ISO,17632-A**, T42 4 1Ni Y NO 1 H10

**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.

Hobart and Fabshield are registered trademarks of Hobart Brothers LLC, Troy, Ohio.

Revision Date: **230925** (Replaces 230531)

640-M1, INDEX

