

# Fabshield® 71K6-NP



AWS A5.29: E71T8-K6J H8  
EN ISO 17632-A: T 42 4 1Ni Y 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-NP	AWS Spec
Carbon (C)	0.053	0.15
Manganese (Mn)	1.141	0.50-1.50
Silicon (Si)	0.068	0.80
Sulphur (S)	0.005	0.030
Phosphorus (P)	0.009	0.030
Aluminum (Al)	0.891	1.8
Nickel (Ni)	0.812	0.40-1.00
Chromium (Cr)	0.145	0.20
Molybdenum (Mo)	0.007	0.15
Vanadium (V)	0.001	0.05

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

### TYPICAL DIFFUSIBLE HYDROGEN\*:

Hydrogen Equipment	Fabshield 71K6-NP	AWS Spec
(GAS CHROMATOGRAPHY)	4.7 ml/100g	8.0 ml/100g Maximum

### TYPICAL MECHANICAL PROPERTIES:

Mechanical Tests	As Welded		PWHT 4 Hrs. @ (1150°F)	
	Fabshield 71K6-NP	AWS Spec	Fabshield 71K6-NP	AWS Spec
Tensile Strength	82,100 psi (565 MPa)	70,000-90,000 ksi (490-620 MPa)	76,800 psi (530 MPa)	Not specified
Yield Strength	69,400 psi (478 MPa)	58,000 ksi (400 MPa) Minimum	64,600 psi (445 MPa)	Not specified
Elongation % in 2" (50 mm)	26.6%	20% Minimum	28.3%	Not specified

### TYPICAL CHARPY V-NOTCH IMPACT VALUES:

CVN Temperatures	As Welded		PWHT 4 Hrs. @ (1150°F)	
	Fabshield 71K6-NP	AWS Spec	Fabshield 71K6-NP	AWS Spec
Avg. at -40°F (-40°C)	127 ft•lbs (172 Joules)	20 ft•lbs (27 Joules) Minimum "J" requirements	221 ft•lbs (300 Joules)	Not specified

\*The information contained or otherwise referenced herein is presented only as "typical" without guarantee or warranty, and Hobart Brothers Company 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 Company.

# Fabshield<sup>®</sup> 71K6-NP

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	225	20	100 (2.5)	5.1 (2.3)	1 (25)			
5/64	(2.0)	Flat	270	21	130 (3.3)	6.0 (2.7)	1 (25)			
5/64	(2.0)	Overhead	175	18	65 (1.7)	2.8 (1.3)	1 (25)			
5/64	(2.0)	Vertical Up/Vertical Down	190	18	85 (2.2)	4.0 (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)	33-lb. (15kg)
Inches	(mm)	Coil	Vacuum-Packed Spool
5/64	(2.0)	S228425-P01	S228425-053

#### CONFORMANCES AND APPROVALS:

- **AWS A5.29**, E71T8-K6J H8
- **AWS A5.29M**, E491T8-K6J H8
- **ASME SFA 5.29**, E71T8-K6J H8
- **EN ISO 17632-A**: T 42 4 1Ni Y 1 H10
- **ABS**, E71T8-K6J H8 [5/64" (2.0 mm) only]
- **Lloyd's Register**, 4Y H10 [5/64" (2.0 mm) only]
- **DNV-GL**, IV YMS H10 [5/64" (2.0mm) only]

**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 Company product may be obtained from Hobart Customer Service or at [www.hobartbrothers.com](http://www.hobartbrothers.com).

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

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640-M1, INDEX

