# 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
- Ships
- Construction
- Transportation

- Structural and general fabrication
- Barges
- Piping

SHIELDING GAS: Not required

Type of Current: Direct Current Electrode Negative (DCEN)

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

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 (AI)	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)		
Wechanical resis	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)		
CVN remperatures	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	

<sup>\*</sup>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® 71K6-NP

Diam Inches	eter (mm)	Weld Position	Amps	Volts	Sp	-Feed eed (m/min)	R	osition ate (kg/hr)	Contac Work D Inches	•
5/64 5/64 5/64 5/64	(2.0) (2.0) (2.0) (2.0)	Flat & Horizontal Flat Overhead Vertical Up/Vertical Down	225 270 175 190	20 21 18 18	100 130 65 85	(2.5) (3.3) (1.7) (2.2)	5.1 6.0 2.8 4.0	(2.3) (2.7) (1.3) (1.8)	1 1 1	(25) (25) (25) (25)

<sup>·</sup> 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. (6.3kg) Coil	33-lb. (15kg) 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: T42 4 1Ni Y NO 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

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); 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. Because Hobart Brothers Company is constantly improving products, Hobart reserves the right to change design and/or

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