# Fabshield®Offshore 71Ni



AWS E71T8-K6 J H8 EN17632 T 38 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
- ips Construction
- · Structural and general fabrication · Barges

SLAG SYSTEM: Fast freezing, basic type, self-shield 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	Typical	AWS Spec
Carbon (C)	0.05	0.15
Manganese (Mn)	1.21	0.50-1.50
Silicon (Si)	0.07	0.80
Sulphur (S)	0.004	0.03
Phosphorus (P)	0.011	0.03
Aluminum (Al)	0.90	1.8
Nickel (Ni)	0.85	0.40-1.00
Chromium (Cr)	0.005	0.20
Molybdenum (Mo)	0.01	0.15
Vanadium (V)	0.004	0.05

Note: Single values are maximums.

#### TYPICAL DIFFUSIBLE HYDROGEN\*:

Hydrogen Equipment	Fabshield Offshore 71Ni (H8)	AWS Spec
(GAS CHROMATOGRAPHY)	5.60ml/100g	8.0 ml/100g Maximum

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

				PWHT 2 HR. @ 1150°F (620°C)	
	1G	2G	3G Vertical Up	3G Vertical Up	AWS Spec
Tensile Strength	76,300 psi (526 MPa)	76,400 psi (527 MPa)	77,400 psi (533 MPa)	72,800 psi (502 MPa)	70-90 ksi (490-620 MPa)
Yield Strength	62,200 psi (429 MPa)	61,600 psi (425 MPa)	61,200 psi (422 MPa)	59,400 psi (410 MPa)	58 ksi (400 MPa) Minimum
Elongation % in 2"	28.8%	27%	30.9%	31.1%	20%

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

CVN Temperatures	1G	3G Vertical Up	AWS Spec
Avg. at -20°F (-30°C)	295 ft•lbs (400 Joules)	192 ft•lbs (260 Joules)	20 ft•lbs (27 Joules) Minimum
Avg. at -40°F (-40°C)	141 ft•lbs (191 Joules)	90 ft•lbs (122 Joules)	20 ft•lbs (27 Joules) Minimum "J" requirements

<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 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®Offshore 71Ni

Diam	neter	Weld			Wire-Feed Deposition Speed Rate		Contact Tip to Work Distance			
Inches	(mm)	Position	Amps	Volts	in/min	(m/min)	lbs/hr	(kg/hr)	Inches	(mm)
5/64	(2.0)	Flat	250	20	105	(2.7)	5.3	(2.3)	1	(25)
5/64	(2.0)	Horizontal Fillet	280	20	126	(3.2)	6.1	(2.7)	1	(25)
5/64	(2.0)	Overhead	180	18	60	(1.5)	2.7	(1.2)	1	(25)
5/64	(2.0)	*Vertical Up	200	18	75	(1.9)	3.6	(1.7)	1	(25)

Maintaining a proper welding process, such as pre-heat, interpass temperature, and material thickness may be critical depending on the types of steel being welded.

**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.

Dian	neter	10-lb. (4.5kg)	33-lb. (15kg)
Inches	(mm)	Spool	Spool
5/64	(2.0)	S292025-032	S292025-053

#### **CONFORMANCES AND APPROVALS:**

- AWS A5.29, Class E71T8-K6 J H8
- ABS E71T8-K6J H8
- ASME SFA 5.29, Class E71T8-K6 J H8
- EN17632-A T 38 4 1Ni Y 1 H10

#### 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, 550 NW LeJune Road, Miami, FL 33126; OSHA Safety and Health Standards 29 CFR 1910 is available from the U.S. Department of Labor, Washington, D.C. 20210

Material 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 specifications without notice.

Fabshield is a trademark of Hobart Brothers Company, Troy, Ohio.

Revision Date: 120125 (Replaces 110915)



<sup>·</sup> See Above:

<sup>\*</sup> Also recommended for Vertical Down cap passes.