AWS E71T-11

Fabshield®21B

DESCRIPTION:

Fabshield 21B is a general purpose self-shielded flux-cored wire designed for the single-or multi-pass welding of thin gage to 3/4" thick mild or galvanized steels. Great for welding fillet or lap welds, you will find that this all-position wire has high operator appeal, producing a smooth spray-like arc transfer with low spatter levels, excellent weld bead appearance, and easy to remove slag.

APPLICATIONS:

Machine parts, tanks, prefab construction, light structurals, short assembly welds, railroad car repairs, and other general fabrication.

FEATURES:	BENEFITS:
• Excellent operator appeal	• Reduces welding fatigue for increased productivity
• Versatile	• Ideal for a variety of applications
• Self-shielded	• No external shielding gas required
• Excellent bead appearance	• Helps to ensure weld integrity and eliminate re-work
• Excellent slag removal	• Makes clean-up easy and quick

SHIELDING GAS: None required

TYPICAL WELD METAL PROPERTIES* (Chem Pad):

Weld Metal Analysis:

Carbon (C)	0.28
Manganese (Mn)	0.34
Silicon (Si)	0.15
Phosphorus (P)	0.008
Sulphur (S)	0.003
Aluminum (Al)	1.04

TYPICAL MECHANICAL PROPERTIES* (AW):

Tensile Strength:	91,000 psi (627 MPa)
Yield Strength:	62,000 psi (427 MPa)
Elongation % in 2"	22%

TYPICAL CHARPY-V-NOTCH IMPACT VALUES* (AW): Not applicable

Conformances and Approvals:

• AWS A5.20, Class E71T-11 • ASME SFA 5.20, Class E71T-11 • ABS

*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 A5.20 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.

ITW/Hobart Brothers Company • 400 Trade Square East • Troy, OH 45373
PH: (800) 424-1543 • FX: 800-541-6607 • www.hobartbrothers.com

HOBART®

Fabshield®21B

WELDING DATA:

The information listed below was determined by welding performed with DCEN welding current.

Diameter Inches	mm	Optimum Welding Parameter	Weld Position	Amps	Volts	Weld Feed Speed in/min	Deposition Rate lbs/hr	Stickout ±1/4"
.045	1.2		Flat	130	15.0	105	1.80	1/2"
.045	1.2	*	Flat Fillet	160	17.0	170	2.76	1/2"
.045	1.2	*	Horizontal Fillet	160	16.5	170	2.76	1/2"
.045	1.2	*	Vertical-up Fillet	130	16.0	125	1.80	1/2"
.045	1.2	*	Overhead Fillet	130	16.0	125	1.80	1/2"
1/16	1.6		Flat	150	18.0	70	2.40	3/4"
1/16	1.6	*	Flat	250	20.0	144	5.88	3/4"
1/16	1.6	*	Horizontal Fillet	200	19.0	99	3.54	3/4"
.068	1.7		Flat	175	18.5	49	1.92	3/4"
.068	1.7	*	Flat	200	20.0	94	3.54	3/4"
.068	1.7		Flat	225	21.0	111	5.16	3/4"
.068	1.7		Flat	275	22.0	159	7.38	3/4"
.068	1.7	*	Horizontal Fillet	200	20.0	94	3.54	3/4"
5/64	2.0	*	Flat	300	22.5	124	7.50	3/4"
5/64	2.0	*	Horizontal Fillet	200	19.0	67	3.30	3/4"
5/64	2.0	*	Horizontal Fillet	250	21.0	90	5.52	3/4"
3/32	2.4		Flat	250	18.5	57	4.98	3/4"
3/32	2.4		Flat	300	20.0	75	6.48	3/4"
3/32	2.4	*	Flat	300	21.5	75	6.48	3/4"
3/32	2.4	*	Horizontal Fillet	300	21.5	75	6.48	3/4"

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 ITW/Hobart Brothers Company product may be obtained from ITW/Hobart Customer Service.

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

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

HOBART®