

Tube-Alloy® Build Up-G







DESCRIPTION:

Tube-Alloy Build Up-G is a gas-shielded, metal-cored wire designed for build-up on carbon and a low-alloy steels. The weld metals have good compressive strength and impact resistance, making them excellent bases for more abrasion-resistant alloy.

OPERATIONAL CHARACTERISTICS:

Used with 100% CO₂ or 75% Ar/25% CO₂ shielding gas, Tube-Alloy Build-Up-G ensures a uniform, porosity-free deposit with an efficiency that is equal to those of solid wires. It has excellent operator appeal in all positions.

RELATIVE WEAR RESISTANCE:

 abrasion	
 impact	
 heat	
Low Microstructure High (Low Carbon Martensitic)	

TYPICAL WELD METAL PROPERTIES* (Chem Pad):

Weld Metal Analysis

Carbon (C)	0.26
Manganese (Mn)	1.73
Silicon (Si)	0.32
Chromium (Cr)	1.82
Iron (Fe)	Bal.

TYPICAL MECHANICAL PROPERTIES* (As Welded):

Hardness	25-35 Rc
Abrasion resistance	Fair
Impact resistance	Very Good
Machinability	Good
Can be flame cut	
Magnetic	

*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. No data is to be construed as a recommendation for any welding condition or technique not controlled by Hobart Brothers LLC.

Tube-Alloy[®] Build Up-G

RECOMMENDED OPERATING PARAMETERS:

Diameter Inches	Diameter mm	Type of Power	Stick-Out		Optimum Amps	Volts	Deposition Rate	
			Inches	mm			Amps	lb/hr
.045	1.2	DCEP	1/2-1	13-25	120-160	19-23	130	4
					160-190	24-25	180	7
					190-230	26-27	220	10

Use with 100% CO₂ or 75% Ar/25% CO₂ shielding gas. Start with **middle range** and adjust accordingly. Higher amperages will increase deposition rate, dilution, and heat input to base metal. Increasing voltage will widen and flatten bead profile, but excessive voltage will result in porosity. Too much electrical stick-out may result in increased spatter, too little may result in internal porosity.

AVAILABLE DIAMETERS AND PACKAGES:

Diameter Inches	Diameter mm	33-lb. Spool
.045	1.2	S235012-029

APPLICATIONS:

- Bucket Teeth and Lips
- Crane Wheels
- Dragline Buckets
- Dragline Chains
- Dredge Ladder Rolls
- Gear Teeth
- Kiln Trunnions
- Mine Car Wheels
- Spindles
- Steel Shafts
- Wobbler Ends

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

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); 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.

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

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Revision Date: **190304** (Replaces 160523)
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