

Hardalloy[®] 155



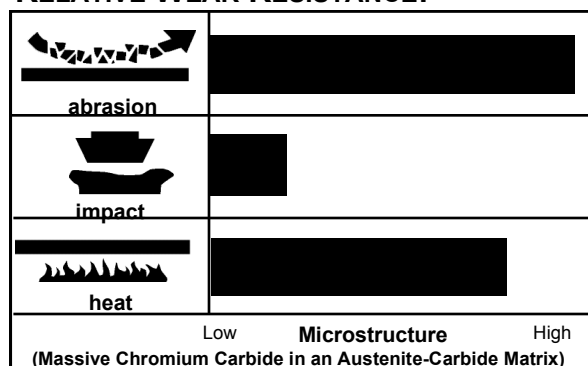
DESCRIPTION:

Hardalloy 155 deposits on extra high chromium carbide alloy steel intended for overlay on surfaces subjected to extremely severe abrasion. It maintains its hot hardness to 1250°F and has an excellent edge-building capability. Hardalloy 155 is designed for overlay on carbon, low alloy, or manganese steel base metals or over a welded build-up base of Hardalloy 32, Hardalloy 118, or Chrome-Mang. Relief check cracking will readily occur with this product. This cracking is not detrimental to the wear properties of the deposit and provides some degree of stress relief for the weld metal.

OPERATIONAL CHARACTERISTICS:

Hardalloy 155 operates with a globular transfer and has minimal slag coverage. It has an excellent edge-building capability. A 1/4 inch arc length should be maintained when welding vertical surfaces; the smaller diameters have better operating characteristics. Vertical surfaces may be overlaid by building a series of horizontal beads on a “shelf” using a weave technique.

RELATIVE WEAR RESISTANCE:



TYPICAL WELD METAL PROPERTIES* (CHEM PAD):

Weld Metal Analysis

Carbon (C)	5.50
Manganese (Mn)	0.40
Silicon (Si)	1.00
Chromium (Cr)	32.00
Molybdenum (Mo)	4.50
Iron (Fe)	Bal.

TYPICAL MECHANICAL PROPERTIES* (AS WELDED):

Hardness - as Deposited	59-63 Rc
Nonmachinable - grinding is difficult	
Cannot be flamed cut	
Deposit will relief-check crack readily	
Deposit maintains hot hardness to 1250°F	
Thickness should be limited to 3 layers max.	

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

Hardalloy® 155

RECOMMENDED OPERATING PARAMETERS:

Diameter Inches	mm	Type of Power	Minimum Amps	Optimum Amps	Maximum Amps	Deposition Rate lb/hr [†]
1/8	3.2	DCEP* or AC	115	140	150	3.5
5/32	4.0	DCEP* or AC	130	150	170	4.5
3/16	4.8	DCEP* or AC	160	190	210	6.0

* Preferred

[†] Typical at optimum settings

Note: To maximize deposition use higher amperages. To minimize penetration (and dilution) use lower amperages.

AVAILABLE DIAMETERS AND PACKAGES:

Diameter Inches	mm	Length		10-lb. Can
		Inches	mm	
1/8	3.2	14	355	S542244-033
5/32	4.0	14	355	S542251-033
3/16	4.8	14	355	S542258-033

APPLICATIONS:

- Ammonia Knives
- Augers
- Bucket Teeth and Lips
- Bulldozer Blades
- Cement Chutes
- Coke Chutes
- Coke Pusher Shoes
- Coal Feeder Screws
- Coal Pulverizer Hammers
- Conveyor Screws
- Crusher Rolls
- Cultivator Chisels and Sweeps
- Dredge Cutter Heads and Teeth
- Dredge Pump Inlet Nozzle and Side Plates
- Fan Blades
- Grizzly Bars and Fingers
- Manganese Pump Shells
- Muller Tires
- Ore/Coal Chutes
- Paving Agitator Screws
- Pipeline Ball Joints
- Pug Mill Paddles
- Ripper Shanks
- Road Rippers
- Sheepsfoot Tampers
- Sizing Screens
- Subsoiler Teeth

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 36 St, # 130, Doral, FL 33166-6672 (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

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.

Hobart and Hardalloy are registered trademarks of Hobart Brothers Company, Troy, Ohio.

Revision Date: 140829 (Replaces 981201)

220-F, INDEX

