

VertiWear[®] AP



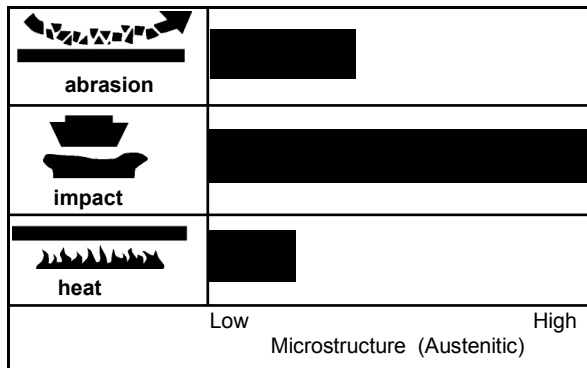
DESCRIPTION:

VertiWear AP is a premium, work-hardening austenitic manganese steel alloy. It can be used for build-up or overlay on austenitic manganese steel. It can also be used for joining austenitic manganese steel to manganese steel, carbon steel, and low-alloy steel. The deposit has an excellent impact resistance and rapidly work-hardens to 50-55 Rc. Conforms to AWS A5.21, classification ERCFeMnCr.

OPERATIONAL CHARACTERISTICS:

VertiWear AP is a unique gas-shielded, flux-cored, all-position wire designed to operate in a smooth, semi-spray arc transfer. The deposit has excellent slag removal and appearance. Can be used with either 100% CO₂ or 75% AR/25% CO₂ shielding gas.

RELATIVE WEAR RESISTANCE:



TYPICAL WELD METAL PROPERTIES* (CHEM PAD):

AWS A5.21
ERCFeMnCr
Annex A 7.1.7

Weld Metal Analysis		
Carbon (C)	0.45	0.25-0.75
Manganese (Mn)	14.00	12-18
Silicon (Si)	0.50	1.3
Chromium (Cr)	13.50	11-16
Nickel (Ni)	0.50	2.0
Iron (Fe)	Bal.	Bal.
Molybdenum (Mo)	0.00	2.0

For AWS Classification Single Values are Maximum

TYPICAL MECHANICAL PROPERTIES* (AS WELDED):

	Number of Layers	As Deposited on 1020 Steel
Hardness	1	24 Rc
	2	20 Rc
	3 - 8	18 Rc
Rapidly work hardens to 50-55 Rc		
Abrasion resistance	Good	
Impact resistance	Excellent	
Machinability	Fair	
Cannot be flame cut		

*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.

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RECOMMENDED OPERATING PARAMETERS:

Diameter		Position	Stick-out		Optimum Amps	Volts	Wire Feed Speed	
Inches	mm		Inches	mm			lpm	mpm
.045	12	Flat	1/2	13	225	26	520	13.2
		Horizontal	1/2	13	180	25	340	8.6
		Vertical	1/2	13	165	25	300	7.6

Parameters may be adjusted ± 25 amps and ± 1 volt for optimum performance. A constant potential power source is recommended, using DC Reverse (+) polarity with 75% Ar/25% CO₂ or 100% CO₂ shielding gas.

AVAILABLE DIAMETERS AND PACKAGES:

Diameter		25-lb. Spool
Inches	mm	
.045	1.2	S606812-029

APPLICATIONS:

- Bucket Teeth and Lips
- Crusher Jaws and Cones
- Dragline Buckets
- Dredge Cutter Heads and Teeth
- Grizzly Bars and Fingers
- Gyrotory Crusher Mantles and Cones
- Hammer Mill Hammers
- Hydroelectric Turbines
- Impactor Crusher Bars
- Muller Tires
- Pulverizer Hammers
- Sizing Screens

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.

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Revision Date: 150305 (Replaces 100806)
260-C, INDEX

