



ArmorWear™ MAIN LINE

OPEN ARC HARD SURFACING WIRE Overlay

Original

260-F1 INDEX: 021003

DESCRIPTION:

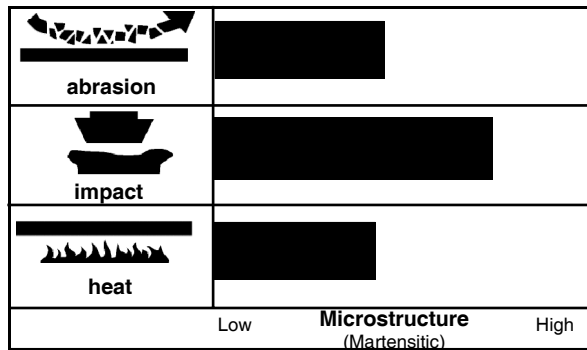
ArmorWear is a self-shielded, flux-cored wire that deposits a premium martensitic alloy steel of H-12 tool steel composition. It has excellent resistance to adhesive (metal-to-metal) wear. It also has good resistance to abrasion and impact, and maintains its hardness up to 1000°F. It is designed for use as an overlay on carbon and low alloy steels. Because of its high hardenability, proper preheat may be required for crack-free deposits, particularly on low alloy steels. ArmorWear is formulated to optimize performance with the small 110/220V type wire welding machines.

OPERATIONAL CHARACTERISTICS:

ArmorWear has a steady arc with smooth spray transfer. Spatter and noise levels are minimal, with a complete, easily removed slag cover. Out-of-position welding is limited to a horizontal shelf technique.

POLARITY: DCEN (straight polarity) recommended for best results; also DCEP (reverse polarity).

RELATIVE WEAR RESISTANCE:



TYPICAL WELD METAL PROPERTIES* (CHEM PAD):

Weld Metal Analysis

Carbon (C)	0.40
Manganese (Mn)	1.00
Silicon (Si)	0.40
Chromium (Cr)	5.80
Molybdenum (Mo)	1.50
Tungsten (W)	1.40
Iron (Fe)	Bal.

TYPICAL MECHANICAL PROPERTIES* (AS WELDED):

	Number of Layers	As-Deposited on 1020 Steel
Hardness	1	47 Rc
	2	49 Rc
	3	53 Rc

(Continued on back)

*The information contained or otherwise referenced herein is presented as "typical" without guarantee or warranty, and McKay 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 McKay.



TYPICAL MECHANICAL PROPERTIES* (AS WELDED):

(Continued)

Abrasion resistance	Good
Impact resistance	Good
Nonmachinable	Grinding only
Flame cutting	Difficult
Magnetic	
Heat-treatable and forgeable	
Maintains hot hardness up to 1000°F	

RECOMMENDED OPERATING PARAMETERS:

Diameter		Type of Power*	Stick-Out		Amps	Volts
Inches	mm		Inches	mm		
.035	.9	DCEN	1/2—5/8	13-16	80-120	15-18
					120-150	17-20
					150-190	18-21

Start with **middle ranges** 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 stickout may result in increased spatter, too little may result in internal porosity.

*DCEN (straight polarity) is recommended. Satisfactory operation with DCEP (reverse polarity) also.

AVAILABLE DIAMETERS AND PACKAGES:

Diameter	10 lb. Spool
.035	S605708-Z22

APPLICATIONS:

- Bucket lips and teeth
- Cultivator chisels and sweeps
- Plow shares, scraper blades
- Shanks, knives, teeth
- Kiln trunnions
- Spindles
- Pump components

Material Safety Data Sheets on any McKay product may be obtained from McKay Customer Service. Because McKay is constantly improving products, McKay reserves the right to change design and/or specifications without notice.

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