



# Tube-Alloy<sup>®</sup> 242-S

**SUBMERGED-ARC HARD SURFACING WIRE OVERLAY**

Replaces 990129

270-E, INDEX: 031028

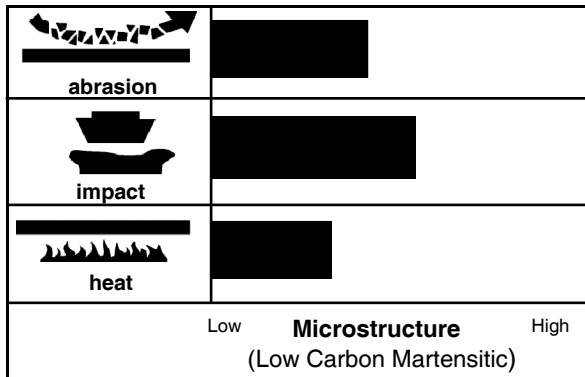
## DESCRIPTION:

Tube-Alloy 242-S deposit is a low alloy, medium-hardness martensitic steel. It can be used as a hard surfacing overlay where good abrasion resistance and machinability are required.

## OPERATIONAL CHARACTERISTICS:

Tube-Alloy 242-S is a high-deposition rate wire that produces sound, porosity-free, crack-free weld deposits. McKay MK-N flux is recommended.

## RELATIVE WEAR RESISTANCE:



## TYPICAL WELD METAL PROPERTIES\* (CHEM PAD):

### Weld Metal Analysis

Carbon (C)	0.16
Manganese (Mn)	1.90
Silicon (Si)	0.80
Chromium (Cr)	1.60
Molybdenum (Mo)	0.60
Iron (Fe)	Bal.

## TYPICAL MECHANICAL PROPERTIES\* (AS WELDED):

	Number of Layers	As-Deposited on 1020 Steel	As-Deposited on 1045 Steel
Hardness	1	29 Rc	44 Rc
	2	38 Rc	45 Rc
	3	39 Rc	40 Rc
Abrasion resistance	Good		
Impact resistance	Good		
Machinability	Good		
Can be flame cut			
Strongly magnetic			

\*The information contained or otherwise referenced herein is presented only 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.



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## RECOMMENDED OPERATING PARAMETERS:

Diameter		Type of Power	Stick-Out		Travel Speed (per minute)		Optimum Amps	Volts	Deposition Rate lb/hr <sup>+</sup>	
Inches	mm		Inches	mm	Inches	mm				
1/8	3.2	DCEP	1-1/4	1-1/2	32-38	14-18	356-456	400-450	26-28	16
								450-500	27-30	20
								500-550	29-32	24
5/32	4.0	DCEP	1-1/4	1-1/2	32-38	16-20		406-500	28-30	18
								500-600	29-32	23

<sup>+</sup>Typical at optimum settings

## AVAILABLE DIAMETERS AND PACKAGES:

Diameter		500 lb. Auto-Pak
Inches	mm	
1/8	3.2	S614243-066
5/32	4.0	S614250-066

## APPLICATIONS:

- Crane Weels
- Tractor Idlers and Rollers

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

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