Tube-Alloy® A2JL-S

**SUBMERGED-ARC HARD SURFACING WIRE**   **Overlay**

DESCRIPTION:

Tube-Alloy A2JL-S deposit is a modified stainless steel composition. It offers good resistance to metal-to-metal wear, corrosion and thermal fatigue fire cracking.

OPERATIONAL CHARACTERISITCS:

Tube-Alloy A2JL-S is a high deposition rate wire that produces sound, porosity-free, crack-free deposits. McKay MK-N flux is recommended.

RELATIVE WEAR RESISTANCE:

	Low	Microstructure (Martensitic)	High
abrasion			
impact			
heat			
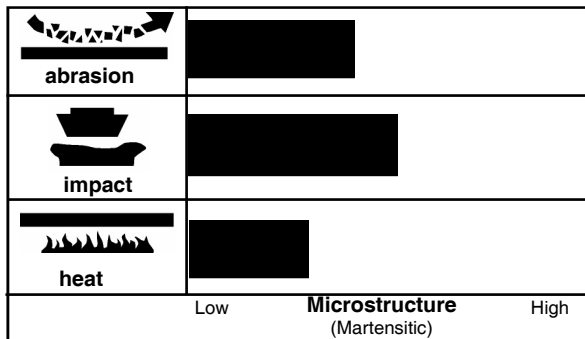
TYPICAL WELD METAL PROPERTIES* (CHEM PAD):

Weld Metal Analysis

Carbon (C)	0.04
Manganese (Mn)	0.80
Silicon (Si)	0.60
Chromium (Cr)	13.50
Molybedenum (Mo)	1.00
Nickel (Ni)	2.00
Iron (Fe)	Bal.

TYPICAL MECHANICAL PROPERTIES* (AS WELDED):

	Number of Layers	As-Deposited on 1020 Steel
Hardness	1-3	40 Rc
	4-8	33 Rc

Hardness As-Deposited	Time at Temp.	Hardness after Tempering		
		950ºF	1050ºF	1150ºF
35 Rc	6 Hr.	29 Rc	23 Rc	21 Rc
	10 Hrs.	22 Rc	22 Rc	19 Rc
	20 Hrs.	25 Rc	22 Rc	19 Rc

*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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TYPICAL MECHANICAL PROPERTIES* (AS WELDED):
(contined)

Abrasion resistance	Good
Impact resistance	Good
Machinability	Good with carbide tools
Cannot be flame cut	
Slightly magnetic	
Deposit thickness	As required

RECOMMENDED OPERATING PARAMETERS:

Diameter		Type of Power	Stick-Out		Travel Speed (per minute)		Optimum Amps	Deposition Rate
Inches	mm		Inches	mm	Inches	mm		
1/8	3.2	DCEN	11/4 - 1 1/2	32-38	14-18	356-456	400-450	16
							450-500	20
							500-550	24

ᵗ Typical at optimum settings

AVAILABLE DIAMETERS AND PACKAGES:

Diameter		600-lb. Auto-Pak
Inches	mm	
1/8	3.2	S614543-008

APPLICATIONS:
- Continuous Caster Rolls