

Lehami 7402

Joining and cladding electrode for manganese steel that can be flame cut



SPECIAL FEATURES

- Spray transfer allows for smooth uniform overlays.
- Work hardens easily in service.
- Rare alloy that can be flame cut.

APPLICATIONS

For repair of rail equipment and construction equipment manufactured of manganese steel.

AVAILABLE SIZES

INCHES	METRIC	GAUGE	RECOMMENDED AMPERAGE
1/8″	3.2 mm	10	90 - 125
5/32"	4.0 mm	8	125 - 170
3/16"	5.0 mm	6	160 - 225

RECOMMENDED CURRENT: DC Reverse polarity (Electrode +) or AC

WELDING POSITIONS: Flat, Horizontal, Vertical Up, Overhead

WELDING TECHNIQUES:

Clean metal of oil and fatigued sections. Do not allow weld interpass temperature to exceed 500°F (260°C).

TYPICAL MECHANICAL PROPERTIES

Undiluted Weld Metal	Maximum Value Up to:			
Tensile Strength as welded	116,000 psi (800 N / mm²)			
Elongation	38%			
Reduction of Area	25%			
Impact Energy	50 Joules: 68°F (20°C)			
Hardness (As welded)	Brinell 170 - 220, Rockwell B 87 - 96 Vickers 180 - 230			
Hardness (Worked)	Brinell 380 - 550, Rockwell C 41 - 54 Vickers 400 - 580			

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MICROSTRUCTURE:

In as-deposited condition the microstructure consists of a soft manganese alloy austenite which rapidly work hardens under impact loading.

DEPOSITION RATES

Diameter	Length	Weldmetal / Electrode	Electrodes per lb (kg) of Weldmetal	Arc Time of Deposition in Minutes per Ib (kg) of Weldmetal	Recovery Rate
1/8"	14"	0.94 oz	17	24	120 %
(3.2 mm)	(350 mm)	(26 g)	(38)	(53)	
5/32"	14"	1.45 oz	11	19	120 %
(4.0 mm)	(350 mm)	(41 g)	(24)	(42)	
3/16"	14"	2.3 oz	7	13	120 %
(5.0mm)	(350 mm)	(64 g)	(16)	(29)	

WELD METAL ANALYSIS (Typical Weight,%)

С	Cr	Fe	Mn	Ni	Р	S	Si	
0.60	3.75	Bal	16.0	3.65	0.015	0.01	0.08	

INTERNATIONAL SPECIFICATIONS	AWS/ASME None
	DIN 8555 E7-UM-200/50-KP

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