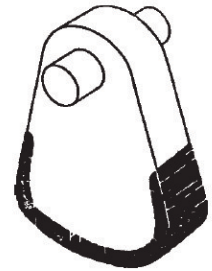


Impact resistant electrode for joining and surfacing steels.



- Extra high strength welds.
- Welds do not spall.
- Outwears ordinary hardfacing alloys in impact conditions as much as 10 to 1.

INTERNATIONAL SPECIFICATIONS	AWS/ASME A 5.4: E 307-26      EN 1600: E 18 8 Mn R 7 3 DIN 8556: E 18.8 Mn MPR 33 160      ISO 3581: E 18.8 Mn R 33 NFA 81-343: EZ 18.8 MnR 160 33 X
------------------------------	--

### APPLICATIONS:

For joining and repairing steel and manganese steel parts used throughout the railroad, construction, and related industries.

### MICROSTRUCTURE:

Austenite plus ferrite.

### ALL WELD METAL ANALYSIS (Typical Weight %):

C	P	S	Mn	Si	Cr	Ni	Mo	Fe
.09	.03	.01	5.8	.3	21.5	8.4	1	bal

**FLUX COLOR:** Grey

**TYPICAL MECHANICAL PROPERTIES:**

<b>Undiluted Weld Metal</b>	<b>Maximum Value Up to:</b>
Tensile Strength	119,000 PSI (830 N/mm <sup>2</sup> )
Yield Strength	72,000 PSI (500 N/mm <sup>2</sup> )
Elongation	41%
Hardness	Brinell 200, Rockwell C10
Work Hardness	Brinell 520, Rockwell C50

**RECOMMENDED CURRENT:** DC Reverse (+) or AC

**RECOMMENDED AMPERAGE SETTINGS:**

Diameter (mm)	1/8(3.25)	5/32 (4.0)	3/16(5.0)
Minimum Amperage	90	120	165
Maximum Amperage	150	210	270

**WELDING POSITIONS:** Flat, horizontal, vertical up

**DEPOSITION RATES:**

Diameter (mm)	Length (mm)	Weldmetal/ Electrode	Electrodes per lb (kg) of Weldmetal	Arc Time of Deposition min/lb (kg)	Amperage Setting	Recovery Rate
1/8 (3.25)	14" (350)	.94oz (26g)	17 (37)	22 (49)	115	160%
5/32 (4.0)	14" (350)	1.8oz (50g)	9 (19)	16 (35)	150	160%
3/16 (5.0)	14" (350)	2.7oz (75g)	6 (14)	11 (25)	210	160%

**WELDING TECHNIQUES:**

Do not pre-heat. Use the lowest possible amperage and move the electrode as quickly as feasible. Allow to cool slowly.