



Manufacturers of Custom Welding Lines for Resale
www.selectrode.com

SELECTRODE 1249

Nickel Chrome Manganese
High Recovery

INTERNATIONAL CLASSIFICATIONS

AWS/ASME A 5.4 E 307-26

EN 1600: E 18 8 Mn R 73X

DIN 8556: E 18.8 Mn MPR 33 160

ISO 3581: E 18.8 Mn R 73X

NFA 81-343: EZ 18.8 MnR 160 33 X

FEATURES & APPLICATIONS

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

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.

ALL WELD METAL ANALYSIS (TYPICAL WEIGHT %)

Microstructure: Austenite plus ferrite.

Flux Color: Grey

C	P	S	Mn	Si	Cr	Ni	Mo	Fe
.09	.03	.01	4.3	.3	21.5	9.8	1	bal

TYPICAL MECHANICAL PROPERTIES

Undiluted Weld Metal

Tensile Strength

Yield Strength

Elongation

Hardness

Work Hardness

Maximum Value Up to:

119,000 PSI (830 MPa)

72,000 PSI (500 MPa)

41%

Brinell 200, Rockwell C10

Brinell 520, Rockwell C50

WELDING CURRENT & INSTRUCTIONS**Recommended Current:** DC Reverse (+) or AC

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

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 Settings	Recovery Rate
1/8 (3.25)	14" (350)	.94 oz. (26g)	17 (37)	22 (49)	115	160%
5/32 (4.0)	14" (350)	1.8 oz (50g)	9 (19)	16 (35)	150	160%
3/16 (5.0)	14" (350)	2.7 oz (75g)	6 (14)	11 (25)	210	160%

Diameter (mm)	3/32 (2.5)	1/8 (3.25)	5/32 (4.0)
Length (mm)	14" (350)	14" (350)	14" (350)
Electrodes / lb	9	6	4
Electrodes / kg	20	13	9