



Manufacturers of Custom Welding Lines for Resale
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SELECTRODE
1133
Vertical Down 316L Stainless

INTERNATIONAL CLASSIFICATIONS

AWS/ASME A 5.4 E 316L-16
DIN 8556: E 19.12.3 LR 16
NFA 81-343: EZ 19.12.3 LR 16

EN 1600: E 19 12 3 L R 31
ISO 3581: E 19.12.3 LR 31

FEATURES & APPLICATIONS

Especially suited for vertical down and up welding of thin to medium gauge molybdenum bearing stainless steels.

Special vertical position stainless steel electrode

- Unique "Fast-Freeze" coating simplifies vertical down and up welding.
- Ideal for poor fit up joints in all positions.
- Controlled weld puddle allows for filling holes on stainless steels.

ALL WELD METAL ANALYSIS (TYPICAL WEIGHT %)

Microstructure: Austenite with 7-9% ferrite. Typical ferrite number is 6.

Flux Color: White

C	Mn	Si	S	P	Cr	Ni	Mo	Cu	Fe
.018	.9	.75	.01	.02	19	12	2.65	.1	bal

TYPICAL MECHANICAL PROPERTIES

Undiluted Weld Metal

Tensile Strength
Yield Strength
Elongation
Impact Energy
Hardness

Maximum Value Up to:

80,000 PSI (550 MPa)
56,000 PSI (390 MPa)
42%
40J: -157°F (-105°C)
Brinell 209, Rockwell B96

WELDING CURRENT & INSTRUCTIONS

Recommended Current: DC Reverse (+) or AC

Diameter (mm)	5/64 (2.0)	3/32 (2.5)	1/8 (3.25)
Minimum Amperage	35	60	90
Maximum Amperage	55	80	110

Welding Techniques: For vertical welding, set amperage at high end of the scale. Maintain a sharp angle with the electrode pointing upward. Whip the electrode quickly back and forth while moving up or down. Electrode may show a red color from the excess amperage which is normal.

Welding Positions: Flat, Horizontal, Vertical up, Vertical down, Overhead

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
5/64 (2.0)	12" (300)	.14oz (4g)	114 (251)	47 (103)	40	100%
3/32 (2.5)	12" (300)	.36oz (11g)	40 (88)	35 (76)	80	100%
1/8 (3.25)	12" (300)	.6 oz. (17g)	25 (57)	21 (46)	110	100%

APPROXIMATE ELECTRODE PACKAGING & DIMENSIONS

Diameter (mm)	5/64 (2.0)	3/32 (2.5)	1/8 (3.25)
Length (mm)	12" (300)	12" (300)	12" (300)
Electrodes / lb	42	30	18
Electrodes / kg	92	67	40