



Manufacturers of Custom Welding Lines for Resale
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SELECTRODE
1158
308L-16

INTERNATIONAL CLASSIFICATIONS

| | |
|---------------------------|------------------------|
| AWS/ASME A 5.4 E 308L-16 | EN 1600: E 19 9 L R 32 |
| DIN 8556: E19.9LR 26 | ISO 3581 E19.9 L R 32 |
| NFA 81-343: EZ 19.9 LR 26 | BS 2926 - 1984 19.9L R |

FEATURES & APPLICATIONS

Use on typical brewery, food, and pharmaceutical equipment, also for architectural fabrication.

General purpose stainless steel electrode designed for ease of use on types 304L, 301, 302, 303, 308 and 321.

- Controlled silicon content provides maximum corrosion/ cracking resistance.
- "Low hydrogen" manufacturing technology ensures high resistance to weld metal porosity.
- High purity core wire gives very low carbon content.

ALL WELD METAL ANALYSIS (TYPICAL WEIGHT %)

Microstructure: Austenite with 3-9% ferrite. Typical ferrite number is 6.

Flux Color: White-Grey

| C | Mn | Si | S | P | Cr | Ni | Mo | Cu | Fe |
|-----|----|-----|-----|-----|------|----|-----|-----|-----|
| .02 | .8 | 1.0 | .01 | .02 | 19.5 | 10 | .75 | .05 | bal |

TYPICAL MECHANICAL PROPERTIES

| | |
|-----------------------------|-----------------------------|
| Undiluted Weld Metal | Maximum Value Up to: |
| Tensile Strength | 77,500 PSI (530 MPa) |
| Yield Strength | 54,000 PSI (370 MPa) |
| Elongation | 38% |
| Impact Energy | 35J: -157°F (-105°C) |
| Hardness | Brinell 205, Rockwell B94 |

WELDING CURRENT & INSTRUCTIONS

Recommended Current: DC Reverse (+) or AC

| Diameter (mm) | 1/16 (1.6) | 5/64 (2.0) | 3/32 (2.5) | 1/8 (3.25) | 5/32 (4.0) |
|------------------|------------|------------|------------|------------|------------|
| Minimum Amperage | 25 | 30 | 55 | 75 | 90 |
| Maximum Amperage | 35 | 50 | 75 | 110 | 140 |

Welding Techniques: Material to be welded should be clean of all contaminants. Maintain a short arc and use stringer beads rather than a weave technique.

Welding Positions: Flat, Horizontal, Vertical up, 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 |
|---------------|-------------|-------------------------|---|--|----------------------|------------------|
| 1/16 (1.6) | 10" (250) | .13oz (3.6g) | 125 (275) | 55 (121) | 30 | 100% |
| 5/64 (2.0) | 12" (300) | .14oz (4g) | 114 (251) | 47 (103) | 40 | 100% |
| 3/32 (2.5) | 12" (300) | .3 oz. (9g) | 50 (109) | 35 (76) | 65 | 100% |
| 1/8 (3.25) | 14" (350) | .7oz (20g) | 22 (49) | 21 (46) | 95 | 100% |
| 5/32 (4.0) | 14" (350) | 1 oz (29g) | 15 (33) | 18 (40) | 120 | 100% |

APPROXIMATE ELECTRODE PACKAGING & DIMENSIONS

| Diameter (mm) | 1/16 (1.6) | 5/64 (2.0) | 3/32 (2.5) | 1/8 (3.25) | 5/32 (4.0) |
|-----------------|------------|------------|------------|------------|------------|
| Length (mm) | 10" (250) | 12" (300) | 12" (300) | 14" (350) | 14" (350) |
| Electrodes / lb | 67 | 42 | 28 | 13 | 9 |
| Electrodes / kg | 147 | 92 | 62 | 29 | 20 |