



T H E H A R R I S P R O D U C T S G R O U P
A L I N C O L N E L E C T R I C C O M P A N Y
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TECHNICAL SPECIFICATION SHEET

316L-16 STAINLESS STEEL COVERED ELECTRODE

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NOMINAL COMPOSITION:

Carbon	.04% max.	Chromium	17.0-20.0%
Nickel	11.0-14.0%	Manganese	.5-2.5 %
Copper	.75% max.	Silicon	.90% max.
Phosphorus	.04% max.	Sulfur	.03% max.
Molybdenum	2.0-3.0%	Iron	Balance
Normal Ferrite Range	4-10		

TYPICAL MECHANICAL PROPERTIES AS WELDED:

Yield Strength (psi)	62,000	Elongation	45%
Tensile Strength (psi)	83,000		

WELDING PROPERTIES:

Electrodes of this composition are most often used to weld base metals of similar composition containing 2 –3% molybdenum content. Sometimes may be used to weld similar base metals in elevated temperature service applications.

316L-16 is a titania type coating for either alternating current (AC) or direct current (DC) reverse polarity.

316L-15 is a lime type coating for use with direct current (DC) reverse polarity.

RECOMMENDED WELDING PARAMETERS:

	<u>1/16 X 12</u>	<u>5/64 X 12</u>	<u>3/32 X 12</u>	<u>1/8 X 14</u>	<u>5/32 X 14</u>	<u>3/16 X 14</u>	<u>1/4 X 14</u>
AMPS	15-40	30-60	50-80	70-110	100-140	130-180	175-220

All parameters are suggested as basic guidelines and will vary depending on joint design, number of passes and other factors.

SPECIFICATION COMPLIANCE: ANSI/AWS A5.4 & ASME SFA 5.4 E 316L-16

WARNING: PROTECT yourself and others. Read and understand this information.

FUMES AND GASES can be hazardous to your health.

ARC RAYS can injure eyes and burn skin.

ELECTRIC SHOCK can KILL.

- Before use, read and understand the manufacturer's instructions, Material Safety Data Sheets (MSDSs), and your employer's safety practices.
- Keep your head out of fumes.
- Use enough ventilation, exhaust at the arc, or both, to keep fumes and gases from your breathing zone and the general area.
- Wear correct eye, ear, and body protection.
- Do not touch live electrical parts.
- See American National Standard Z49.1, *Safety in Welding, Cutting, and Allied Processes*, published by the American Welding Society, 550 N.W. LeJeune Road, Miami, Florida 33126; OSHA Safety and Health Standards, available from the U.S. Government Office, Washington, DC 20402

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