

PRIMALLOY™ JS-316/316L



CONFORMANCE

- AWS A5.4/A5.4M E316-16
- AWS A5.4/A5.4M E316L-16

WELDING POSITIONS



FEATURES

- Rutile-Basic stainless steel electrode
- Weld on AC or DCEP polarity
- Flux coating provides Excellent weldability and easy slag removal
- 2.5%Mo added to provides creep resistance and increased ductility at elevated temperature
- Low carbon level weld metal increase the resistance to intergranular corrosion

REDRYING

- For electrodes that have had a short or mild exposure to the atmosphere, re-drying at 300 °C for 1 hour will be sufficient. For electrodes that have been exposed to longer or more aggressive conditions or critical work environment, re-drying at 300-350 °C for 1-2 hours is recommended. After re-drying, electrodes should be stored in a portable electrode drying oven.

APPLICATION

- Designed for the welding of 19%Cr-12%Ni-2%Mo stainless steels such as 316 316L
- Petrol Chemical Industry
- Power Generation Construction
- Shipbuilding & Offshore
- Food & beverage

APPROVAL

PRIMALLOY™ JS-316L: CCS, ABS

PRIMALLOY™ JS-316/316L

DIAMETERS/PACKAGING

Diameter × Length (mm × mm)	Package - Weight (kg)	
	Inner box	Outer Carton
2.5 x 300	4	16
3.2 x 350	5	20
4.0 x 350	5	20
5.0 x 350	5	20

Please contact your local Lincoln Electric sales office for more alternative types of packaging

ALL WELD METAL MECHANICAL PROPERTIES -- TYPICAL

Electrode	Condition	Tensile Strength (MPa)	Elongation (%)	Ferrite Number (FN)	
PRIMALLOY™ JS-316	AWS Requirement	As Welded	520	30	--
	Typical value	As Welded	610	41	7
PRIMALLOY™ JS-316L	AWS Requirement	As Welded	490	30	--
	Typical value	As Welded	600	42	8

WELD DEPOSITE CHEMICAL COMPOSITIONS (Wt-%) -- TYPICAL

Electrode	C	Si	Mn	P	S	Cr	Mo	Ni	Cu	
PRIMALLOY™ JS-316	AWS Requirement	≤0.08	≤1.0	0.5–2.5	≤0.04	≤0.03	17.0–20.0	2.0–3.0	11.0–14.0	≤0.75
	Typical value	0.04	0.83	0.88	0.022	0.015	19.62	2.18	11.3	0.01
PRIMALLOY™ JS-316L	AWS Requirement	≤0.04	≤1.0	0.5–2.5	≤0.04	≤0.03	17.0–20.0	2.0–3.0	11.0–14.0	≤0.75
	Typical value	0.027	0.82	0.88	0.022	0.014	19.60	2.21	11.28	0.01

RECOMMENDED WELDING CURRENT (CURRENT POLARITY: DC+ & AC)

Diameter × Length (mm × mm)	Welding Position	2.5 x 300	3.2 x 350	4.0 x 350	5.0 x 350
Current (A)	1G, 2G, 2F	50-85	80-120	100-150	140-180
	3G up, 4G	45-80	70-110	90-140	—

Customer Assistance Policy

The business of The Lincoln Electric Company is manufacturing and selling high quality welding equipment, consumables, and cutting equipment. Our challenge is to meet the needs of our customers and to exceed their expectations. On occasion, purchasers may ask Lincoln Electric for advice or information about their use of our products. We respond to our customers based on the best information in our possession at that time. Lincoln Electric is not in a position to warrant or guarantee such advice, and assumes no liability, with respect to such information or advice. We expressly disclaim any warranty of any kind, including any warranty of fitness for any customers particular purpose, with respect to such information or advice. As a matter of practical consideration, we also cannot assume any responsibility for updating or correcting any such information or advice once it has not been given, nor does the provision of information or advice create, expand or alter any warranty with respect to the sale of our products.

Lincoln Electric is a responsive manufacturer, but the selection and use of specific products sold by Lincoln Electric is solely within the control of, and remains the sole responsibility of the customer. Many variables beyond the control of Lincoln Electric affect the results obtained in applying these types of fabrication methods and service requirements.

Subject to change - This information is accurate to the best of our knowledge at the time of printing. Please refer to www.lincolnelectric.com.cn for any updated information.

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