S-316L.16N [17]

TYPE : Rutile, Rutile-acid

AWS A5.4 / ASME SFA5.4 E316L-16
JIS Z3221 ES316L-16 | EN 1600 - E 19 12 3 L R
AWS A5.4 / ASME SFA5.4 E316L-17
JIS Z3221 ES316L-17 | EN 1600 - E 19 12 3 L R

Applications

Welding of extra-low carbon 18%Cr-12%Ni-2%Mo (316L stainless steel).

Characteristics on Usage

S-316L.16N is a lime-titania type electrode provided with a good usability and weldability.
As the all-weld metal has an austenite structure containing proper quantity of ferrite, crack resistibility is good. It has an excellent resistibility to inter-crystalline corrosion in the as-welded condition since carbon content is less and intergranular corrosion resistibility is superior to that of S-316.16N, and as it contains Mo., resistance to heat is also good.
S-316L.17 has a high moisture resistance and good porosity resistibility.

Notes on Usage

① Weaving width should be within two and a half times of electrode's diameter.
② Remove dirts such as oil and dust from the groove.
③ Dry the electrodes at 350℃(662℉) for 60 minutes before use.

Welding Position

1G (PA) 2F (PB) 3G (PF) 4G (PE)

Current

AC or DC +

Typical Chemical Composition of All-Weld Metal (%)

Product Name	C	Si	Mn	P	S	Cr	Ni	Mo
S-316L.16N	0.02	0.75	1.10	0.032	0.015	18.5	11.9	2.5
S-316L.17	0.02	0.73	1.33	0.029	0.016	19.4	11.7	2.5

Typical Mechanical Properties of All-Weld Metal

Product Name	TS MPa(lbs/in²)	EL (%)
S-316L.16N	557 (80,900)	45.2
S-316L.17	560 (81,300)	48.0

Approval

KR, ABS, LR, BV, DNV, NK, CWB
TÜV, CE, DB, CCS (S-316L.16N)
ABS (S-316L.17)

Packing

Packet 2.5 ㎏ (5.5 lbs)
Carton 2.5 ㎏ (5.5 lbs)×4 : 10㎏(22 lbs)

Sizes Available and Recommended Currents (Amp.)

Size mm (in)	2.0 (5/64)	2.6 (3/32)	3.2 (1/8)	4.0 (5/32)	5.0 (3/16)
Length mm(in)	300 (12)	300 (12)	350 (14)	350 (14)	350 (14)
F	25~55	50~85	70~115	95~150	135~180
V-up, OH	20~50	45~80	65~110	85~135	-