

NC-316L, NC-316EL

For welding of extra-low carbon
18%Cr-12%Ni-2%Mo stainless steel

AWS A5.4 E316L-16
KS D7014 E316L-16
JIS Z3221 ES316L-16

Applications

Welding of AISI (SUS) 316L stainless steel.

Characteristics

NC-316L and NC-316EL are lime-titania type electrodes for all-position welding.

As the weld metal is of austenitic structure containing proper quantity of ferrite crack resistibility is good and usability is also good. As extra-low carbon weld metal can be obtained, intergranular corrosion resistibility is superior to that of NC-316.

Creep rupture strength is also good.

Notes on usage

- (1) Keep the arc as short as possible and choose the welding current as low as possible
- (2) Weaving width should be within two and a half times of electrode's diameter.
- (3) When the electrodes have absorbed moisture, dry them at 250~300℃ for 60~90 minutes before use.
- (4) Remove dirt such as oil and dust from the groove.

Typical chemical composition of weld metal (%)

Product name	C	Mn	Si	P	S	Cr	Ni	Mo
NC-316L	0.030	1.06	0.70	0.021	0.006	18.50	12.45	2.35
NC-316EL	0.021	1.10	0.70	0.019	0.006	18.50	12.53	2.41

Typical mechanical properties of weld metal

Product name	TS N/mm ² (kgf/mm ²)	EL (%)
NC-316L	570(58)	45
NC-316EL	570(58)	47

Size & recommended current range (AC or DC +)

Dia. (mm)		2.0	2.6	3.2	4.0	5.0
L (mm)		250	300	350	350	350
Amp.	F	30-50	50-80	70-115	100-150	140-190
	V&OH	25-45	45-75	65-110	95-140	-

• Approval : ABS, DNV, KR, LR

• Tip Color : NC-316L : Green, NC-316EL : First : Green, Second : Black