NC-308L, NC-308EL

For welding of extra-low carbon 18%Cr-8%Ni stainless steel

AWS A5.4 E308L-16
KS D 7014 E308L-16
JIS Z3221 ES308L-16

Applications

Welding of 18%Cr-18%Ni stainless steel such as AISI (SUS) 304L.

Characteristics

NC-308L, NC-308EL are lime-titania type electrodes for all-position welding. As its weld metal has extra-low carbon austenitic structure which contains suitable ferrite, crack resistibility is good and intergranular corrosion resistibility is superior to that of NC-308. In the as-welded conditions the weld metal provides good corrosion resistibility and good mechanical properties. Especially, NC-308EL is superior to intergranular corrosion resistibility of NC-308L.

Notes on usage

(1) Keep the arc as short 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 dirts such as oil and dust from the groove.

Typical chemical composition of weld metal (%)

Product name	C	Mn	Si	P	S	Cr	Ni
NC-308L	0.030	1.10	0.73	0.021	0.008	19.55	9.98
NC-308EL	0.020	1.05	0.71	0.018	0.006	19.30	9.95

Typical mechanical properties of weld metal

Product name	TS N/mm²(kgf/mm²)	EL %
NC-308L	560(57)	48
NC-308EL	550(56)	50

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, LR(NC-308L)
• Tip Color : NC-308L: Red, NC-308EL : First: Red, Second : Black