

NC-316

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

AWS A5.4 E316-16
KS D 7014 E316-16
JIS Z3221 ES316-16

Applications

Welding of AISI (SUS) 316 stainless steel.

Characteristics

NC-316 is a lime-titania type electrode used in all positions.

As the weld metal has austenitic structure including proper quantity of ferrite, its crack resistibility is excellent.

Especially its corrosion resistance against sulphuric acid and nitric acid is excellent.

Heat resistance is much better than that of 18%Cr-8%Ni stainless steel welds.

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°C for 60~90 minutes before use.
- (4) Remove dirt such as oil and scale from the groove.

Typical chemical composition of weld metal (%)

C	Mn	Si	P	S	Cr	Ni	Mo
0.06	1.05	0.73	0.021	0.008	18.85	12.35	2.30

Typical mechanical properties of weld metal

TS N/mm ² (kgf/mm ²)	EL %
580(59)	44

Typical corrosion resistance of weld metal

5% H ₂ SO ₄ (Sulphuric acid) Boiling	5.0g/m ² · hr
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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	60-115	100-150	140-190
	V&OH	25-45	45-75	65-110	94-140	-

• Approval : ABS, DNV

• Tip Color : White