

Application : NEXXARC SC-316L is suitable for welding 18% Cr - 12% Ni - 3% Mo stainless steel (SUS 316, 316L etc.) in petrochemical, pressure vessel, food machinery, medical machinery, fertilizer and other industries.

Character : The seam metal contains a proper amount of ferrite and the crack sensitivity is low; Exhibits excellent corrosion resistance due to its high Mo content. The arc is soft and stable, less splashing, beautiful in shape, good in slag removal, stable wire feeding and has excellent welding process performance.

Welding Positions :



According to :

AWS A5.22 E316LT1-1

EN ISO 17633-A : T 19 12 3 L P C1-1

ASME SFA-5.22M E316LT1-1

EN ISO 17633-B : TS 316L-F C1-1

Deposited Chemical Composition : (wt.%)

	C	Mn	Si	Cr	Ni	Mo	P	S	Cu
AWS	0.04	0.5-2.5	1.0	17.0-20.0	11.0-14.0	2.0-3.0	0.04	0.030	0.75
Result	0.026	1.41	0.55	19.01	12.10	2.62	0.022	0.006	0.04

Deposited Mechanical Performance :

	Tensile Strength MPa	Yield Strength MPa	Elongation %	Impact Value J/°C
AWS	≥485	---	30	≥31
Result	580	---	40	32

Welding Parameter : DCEP (DC+)

Size (mm)	1.2	1.6
Voltage (V)	22-36	25-38
Current (A)	120-260	200-300
Stick out (mm)	15-20	18-25
Flow Rate	20-25	20-25

Instruction :

- 1) When welding in the wind to use a windproof barrier, so as not to cause the occurrence of air holes when the wind is strong.
- 2) Maintain interpass temperature at around 16-100°C.
- 3) The oil stains and rust on the weldments should be cleared away.
- 4) CO₂ Gas Shield (CO₂ ≥ 99.8%), Gas flow 20-25L/min.
- 5) Length of stick out should be around 15-25 mm.
- 6) Wire run out as soon as possible after package open.