

Application : NEXXARC SC-309L is suitable for welding dissimilar steels between stainless steel and carbon steel or low alloy steel. Bottom welding of stainless steel cladding, bottom welding when surfacing 308 series stainless steel on carbon steel or low alloy steel.

Character : The seam metal contains more ferrite and the crack sensitivity is low. The arc is soft and stable, less splashing, beautiful in shape, good in slag removal, stable wire feeding & has excellent welding process performance.

Welding Positions :



According to :

AWS A5.22 E309LT1-1

EN ISO 17633-A : T 23 12 L P C1-1

ASME SFA-5.22M E309LT1-1

EN ISO 17633-B : TS 309L-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	22.0-25.0	12.0-14.0	0.75	0.04	0.030	0.75
Result	0.023	1.34	0.53	23.71	13.31	0.042	0.021	0.002	0.03

Deposited Mechanical Performance :

	Tensile Strength MPa	Yield Strength MPa	Elongation %	Impact Value J°C
AWS	≥ 520	---	30	---
Result	550	---	40	---

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) When performing surfacing and clad steel welding appropriate welding conditions should be selected to control dilution, particularly during the welding of the first layer.
- 3) Maintain interpass temperature at around 16-100°C.
- 4) The oil stains and rust on the weldments should be cleared away.
- 5) CO₂ Gas Shield (CO₂ ≥ 99.6%), Gas flow 20-25L/min.
- 6) Length of stick out should be around 15-25 mm.
- 7) Wire run out as soon as possible after package open.