

SM-308L

SMAW ELECTRODE - STAINLESS STEEL

CLASSIFICATIONS :

AWS A5.4 E308L-16
ASME SFA A5.4 E308L-16
JIS Z3221 ES308L-16
BS EN ISO 1600 E 19 9 L R 1 2

DESCRIPTION

SM-308L is a rutile electrode designed for welding type 308L base metal with low or medium carbon content. The SS-308L contains low carbon to avert carbide precipitation during welding as well as weld service. Excellent for welding 18Cr-8Ni steels.

FEATURES

Smoother arc transfer, Easier slag removal, Less Spatter.
Excellent usability in all positions welding including vertical down.
Suitable for butt and fillet welding of thin plates/sheets.
Smooth and bright weld seams, Smoother with a finer ripple bead surface.
Stable arc on AC and DC.

APPLICATIONS

Typical applications include stainless steel piping in refineries, oil and gas industries, and chemical plants.

CHEMICAL COMPOSITION

	%C	%Mn	%Si	%P	%S
Requirements	0.04 max	0.5 - 2.5	1 max	0.04 max	0.03 max
Typical Results	0.02	0.76	0.55	0.03	0.01
	%Ni	%Cr	%Mo	%Cu	Nb (Cb) Plus Ta
Requirements	9.0 - 11.0	18.0 - 21.0	0.75 max	0.75 max	-
Typical Results	9.92	18.9	0.06	0.06	0.04

MECHANICAL PROPERTIES

	Tensile Strength, Mpa	Yield Strength, Mpa	Elongation, %
Requirements	520 min	-	35 min
Typical Results	585		41

OPERATING PROCEDURES

Polarity	Current (Amps)				
	Ø2.0 mm	Ø2.6 mm	Ø3.2 mm	Ø4.0 mm	Ø5.0 mm
AC	50 - 80	75 - 115	110 - 140	160 - 200	205 - 260
DC ±	45 - 75	70 - 105	100 - 135	145 - 180	185 - 235

WELDING POSITION



NOTE

1. Rebake the electrodes at 250 ~ 300°C for 1 hour and keep it at 100 ~ 150°C prior to use.
2. Use stainless steel wire brush for cleaning of slags.
3. Follow the recommended welding parameters to achieve good sound welds.

SPECIAL METAL KOREA CO., LTD.

File No: SMK-DS-SM-308L Rev.0