

ER308L

Conformance

AWS A5.9 ER308L

Typical Application

• Used in petrochemical, pressure vessel, food processing machinery, medical equipment, chemical fertilizer

Mechanical Properties

Tensile Strength (MPa)	Yield Strength (MPa)	Elongation (%)	Impact Energy (J)	Impact Temperature (°C)
840	730	24.5	85, 93, 75	-40

Chemical Composition %

C	Mn	Si	Cr	Ni	Mo	P	S	Cu
0.023	1.63	0.40	20.12	10.35	0.37	0.013	0.009	0.16

Reference

Shielding Gas	Ar+20%CO ₂		
Gas Flow Rate (L/min)	20~25	20~25	20~25
Diameter (mm)	0.8	1.0	1.2
Current(A) DC ⁺	70~150	100~200	140~220

ER316L

Conformance

AWS A5.9 ER316L

Typical Application

• Applied in petrochemical, chemical fertilizer equipment such as SUS316L and other materials of welding

Mechanical Properties

Tensile Strength (MPa)	Yield Strength (MPa)	Elongation (%)	Impact Energy (J)	Impact Temperature (°C)
840	730	24.5	85, 93, 75	-40

Chemical Composition %

C	Mn	Si	Cr	Ni	Mo	P	S	Cu
0.023	1.90	0.42	19.12	12.59	2.59	0.009	0.008	0.28

Reference

Shielding Gas	Ar+20%CO ₂		
Gas Flow Rate (L/min)	20~25	20~25	20~25
Diameter (mm)	0.8	1.0	1.2
Current(A) DC ⁺	70~150	100~200	140~220