

**TIG Wires**  
AWS ER309L  
**T-309L**

Typical Applications

Welding of similar alloys in wrought or cast forms and clad side of type 304L clad steels. The low ferrite content improves the crack-resistance and corrosion-resistance.

Characteristics Of Usage

1. Used for welding of carbon steel to stainless steels.
2. Also used for overlay cladding of carbon and alloy steels.
3. Intended for service temperatures below 600°F.

Weld Metal Composition

Carbon	0.01 %
Silicon	0.40 %
Manganese	1.92 %
Nickel	13.80 %
Chromium	23.20 %

Mechanical Properties

<b>SG</b>	<b>Ar</b>
<b>T-S (psi)</b>	85,572
<b>EI</b>	42 %
<b>IV (J)</b>	32 °F:110

Available Sizes / Rec. Parameters

Dia in (mm)	Length in (mm)	Weight lb(kg)
.045 (1.2)	39 (1000)	11 (5)
1/16 (1.6)	39 (1000)	11 (5)
3/32 (2.0)	39 (1000)	11 (5)
1/8 (3.2)	39 (1000)	11 (5)
5/32 (4.0)	39 (1000)	11 (5)

Packaging

10# (5 kg) carton

**Detailed Packaging Information**

Welding Positions

All Welding Positions

Approved

BV, LR, DNV, KR

AWS ER309LSi  
**T-309LSi**

Welding of austenitic stainless alloys of the 22%Cr-12%Ni low carbon types and for joining stainless steels to non-alloy or low-alloy steels. The high silicon content improves the welding properties, such as wetting.

1. Silicon enhanced version of the 309L product that significantly improves the wetting out of the weld bead and base metal transitions.
2. Used on dissimilar welding, carbon to stainless and corrosion cladding applications.

Carbon	0.02 %
Silicon	0.75 %
Manganese	2.28 %
Nickel	13.70 %
Chromium	23.20 %

<b>SG</b>	<b>Ar</b>
<b>T-S (psi)</b>	79,771
<b>EI</b>	42 %
<b>IV (J)</b>	32 °F:120

Dia in (mm)	Length in (mm)	Weight lb(kg)
.045 (1.2)	39 (1000)	11 (5)
1/16 (1.6)	39 (1000)	11 (5)
3/32 (2.0)	39 (1000)	11 (5)
1/8 (3.2)	39 (1000)	11 (5)
5/32 (4.0)	39 (1000)	11 (5)

10# (5 kg) carton

**Detailed Packaging Information**

All Welding Positions

**Stainless Steel**  
AWS ER310  
**T-310**

Welding of heat-resistant austenitic steels of the 25%Cr-20%Ni types(STS310S). It has good general oxidation resistance, especially at high temperature.

1. Designed for welding of 310 stainless steels for high temperature applications.
2. Typical uses include oven linings, furnace components, annealing covers and fire box sheets.

Carbon	0.10 %
Silicon	0.43 %
Manganese	1.73 %
Nickel	20.90 %
Chromium	26.60 %

<b>SG</b>	<b>Ar</b>
<b>T-S (psi)</b>	87,023
<b>EI</b>	40 %
<b>IV (J)</b>	32 °F:110

Dia in (mm)	Length in (mm)	Weight lb(kg)
.045 (1.2)	39 (1000)	11 (5)
1/16 (1.6)	39 (1000)	11 (5)
3/32 (2.0)	39 (1000)	11 (5)
1/8 (3.2)	39 (1000)	11 (5)
5/32 (4.0)	39 (1000)	11 (5)

10# (5 kg) carton

**Detailed Packaging Information**

All Welding Positions

