



Manufacturers of Custom Welding Lines for Resale  
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**SELECTRODE**  
**6011**  
**309L Stainless Steel TIG**

**INTERNATIONAL CLASSIFICATIONS**

**AWS A5.9 ER309L**

**BS EN 150 14343-A: 23 12L**

**DIN 8556: 5GX2CrNi24 12**

**FEATURES & APPLICATIONS**

**APPLICATIONS:**

Is used for joining stainless steels to carbon or low alloy steels where the corrosion resistance is of secondary importance.

**MICROSTRUCTURE:**

Austenitic Matrix with a ferrite content of 11 FN according to the Delong diagram

**ALL WELD METAL ANALYSIS (TYPICAL WEIGHT %)**

C	Mn	P	Si	S	Cr	Ni	Fe
.02	2.0	.012	.40	.01	24	13.5	Bal.

**TYPICAL MECHANICAL PROPERTIES**

**Undiluted Weld Metal**

**Maximum Value Up to:**

Tensile Strength

87,000 psi (600 MPa)

Yield Strength

58,000 psi (400 MPa)

Elongation

40%

Impact energy

100 ft lb (136J)

Hardness

Brinell 160, Rockwell B 85

**WELDING CURRENT & INSTRUCTIONS**

**Recommended Current:** DC- (Argon or helium gas should be used to minimize burn-off of the tungsten electrode).

**Recommended Amperage Settings:**

Diameter Inches (mm)	Metal Thickness Inches (mm)	Tungsten Size Inches (mm)	Amps	Travel Speed In/Min mm/s	
1/16 (1.6)	1/16 (1.6)	1/16 (1.6)	35-60	12	5.1
3/32 (2.5)	3/32 (2.5)	1/16 (1.6)	45-85	12	5.1
3/32 (2.5)	1/8 (3.2)	1/16 (1.6)	55-100	12	5.1
1/8 (3.2)	3/16 (5.0)	3/32 (2.5)	65-130	10	4.2