

**COMWELD 308L**


- ▲ Resealable 5kg Plastic Tube.
- ▲ Suitable for Gas and GTA (TIG) Welding.
- ▲ End Stamped with AS / AWS Class '308L'.
- ▲ DARK BLUE COLOUR CODED Pack Label for Instant I.D.

**Classifications:**

AS 1167.2: R308L  
 AWS/ASME-SFA A5.9: ER308L

**Description and Applications:**

Comweld 308L stainless steel is a high quality low carbon rod for the Gas or Gas Tungsten Arc (TIG) welding of a wide range of low carbon and stabilised 300 series stainless steels. It is recommended for the critical welding of 304 and 304L stainless steels in corrosion resistant and cryogenic applications.

**Procedure for Gas (Oxy-acetylene) Welding:**

1. Thoroughly clean all areas to be welded.
2. Adjust flame to a neutral setting.
3. Apply a Stainless Steel flux to filler rod and joint areas.
4. Preheat thicker joint sections.
5. Heat a small area of the joint until molten and progressively add Comweld 308L filler rod to the weld pool. Ensure the rod is melted by the molten weld pool and not the flame.
6. Allow completed joint to cool and remove residual flux by grinding and wire brushing. For the best cleaning and finishing results use CIGWELD "ChromeBright" pickling paste (Part No. 321918).

**Procedure for Gas Tungsten Arc (TIG) Welding:**

1. Thoroughly clean all areas to be joined.
2. For the butt welding of thick plates, bevel edges to 60°-70° included angle.
3. Use a Ceriated tungsten electrode, ground to a sharp needle point making sure the grinding lines run with the length (longitudinally) of the electrode's axis. The length of the needle point should be approximately 2-3 x the diameter of the tungsten electrode.
4. Use Direct Current Electrode Negative (DC-) and Welding Grade Argon.
5. Preheat surfaces to be welded. Heat a spot on the base metal until it shows signs of melting and progressively add the filler rod to the weld pool.
6. For the best cleaning and finishing results use CIGWELD "ChromeBright" pickling paste (Part No. 321918).

**WELD DEPOSIT PROPERTIES:**

Typical Weld Metal	0.2%
Proof Stress	450 MPa.
Typical Weld Metal	
Tensile Strength	600 MPa.
Approximate Melting Point	1400°C
Weld Metal Density	7.95 gms / cm <sup>3</sup>
All Weld Metal	
Microstructure	Austenite with 5 – 8 % ferrite

**TYPICAL ROD ANALYSIS:**

C: 0.015%	Mn: 1.90%	Si: 0.50%
Cr: 19.90%	Ni: 9.75%	P: 0.020%
S: 0.005%	Fe: Balance	

**COMPARABLE CIGWELD PRODUCTS:**

Satincrome 308L-17 electrode  
 AWS A5.4: E308L-17  
 Autocraft 308LSi GMAW wire  
 AWS A5.9: ER308LSi  
 Verti-Cor 308LT FCAW wires  
 AWS A5.22: E308LT-1-1/4

**Packaging Data:**

Rod Size (mm)	Pack Weight /Type	Approximate Rods/kg	Pack Part No.
1.6 x 914	5kg Tube*	69	321406
2.4 x 914	5kg Tube*	30	321407