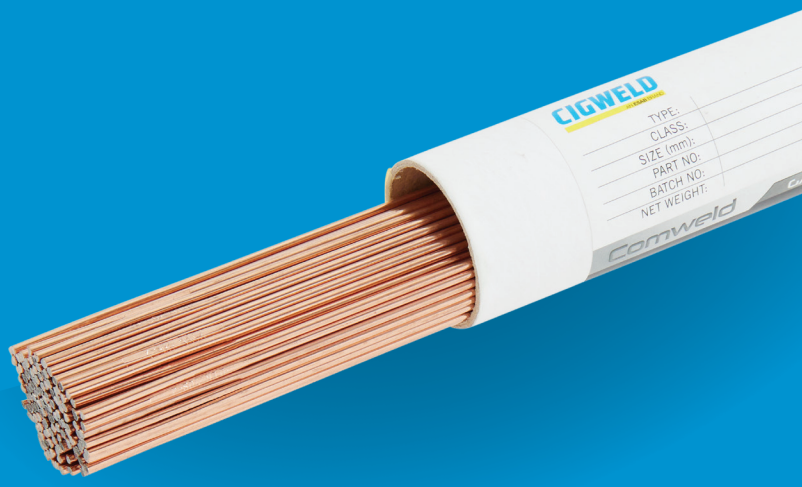
CIGWELD
AN ESAB BRAND

TIG



COMWELD SUPER STEEL

PRODUCT DATA SHEET

COPPER COATED 'TRIPLE DEOXIDISED' STEEL WELDING ROD

GAS AND TIG WELDING CONSUMABLES

COMWELD SUPER STEEL

- Low Carbon Steel Filler Rod for Gas Tungsten Arc (TIG) Welding.
- Triple Deoxidised for Superior Weld Deposit Quality and Resistance to Porosity.
- End Stamped with AWS Class "ER70S-2".
- Resealable 5kg Cardboard Tube.

CLASSIFICATIONS:

AS 1167.2:	**R2**
AWS/ASME-SFA A5.18:	**ER70S-2**

JOINING PROCESS:

Gas Tungsten Arc (TIG) welding.

TYPICAL ALL WELD DEPOSIT MECHANICAL PROPERTIES:

Yield Stress	**425 MPa**
Tensile Strength	**520 MPa**
Elongation	**34%**
CVN Impact Values	**>50 J av @ -29°C**

DESCRIPTION AND APPLICATIONS:

Comweld Super Steel is a copper coated 'triple deoxidised' steel welding rod recommended for the high quality Gas Tungsten Arc (TIG) welding of carbon and carbon-Manganese steels.

Comweld Super Steel is deoxidised with Titanium, Aluminium and Zirconium in addition to Manganese and Silicon for improved weld deposit quality. It is the ideal choice for TIG welding rusty or mill scaled plates and pipes and the root pass welding of pipes, tanks and heavy walled joints where good root toughness and radiographic soundness are achieved under high dilution.

PROCEDURE FOR GAS (OXY-ACETYLENE) WELDING:

1. Thoroughly clean all areas to be welded.
2. Adjust flame to a neutral setting.
3. Preheat thicker joint sections.
4. Heat a small area of the joint until molten and progressively add Comweld Super Steel filler rod to the weld pool. Ensure the rod is melted by the molten weld pool and not the flame.
5. Allow completed joint to cool and remove residual scale by grinding, or wire brushing.

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 thick sections prior to welding. Heat a spot on the base metal until it shows signs of melting and progressively add the filler rod to the weld pool.

TYPICAL ROD ANALYSIS:

C:	**0.06%**
Mn:	**1.08%**
Si:	**0.52%**
Ti:	**0.08%**
Zr:	**0.07%**
Al:	**0.08%**
S:	**0.007%**
P:	**0.008%**
Fe:	**Balance**

COMPARABLE CIGWELD PRODUCTS:

Autocraft Super Steel GMAW wire AWS A5.18: ER70S-2

PACKAGING DATA:

ROD SIZE (MM)	PACK WEIGHT / TYPE	APPROXIMATE RODS / KG	PACK PART NO.
1.6 x 915	5kg Tube	70	321370
2.4 x 915	5kg Tube	31	321373