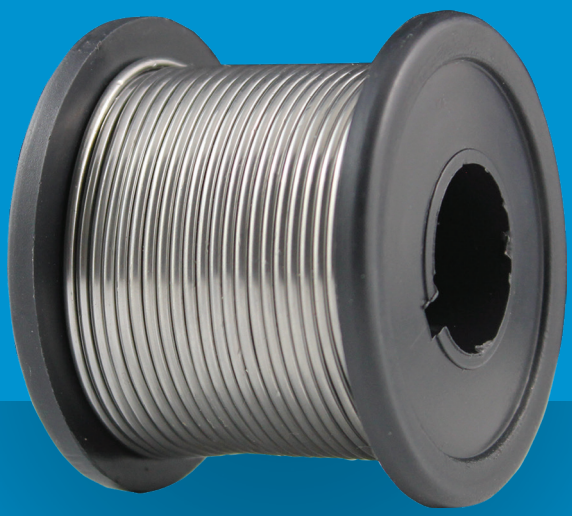
CIGWELD

AN ESAB BRAND

COMWELD 50/50 SOFT SOLDER

PRODUCT DATA SHEET



HIGHER QUALITY GENERAL PURPOSE SOLDER

10.9%

212 °C

COMWELD 50/50 SOFT SOLDER

- Higher Quality General Purpose Solder.
- For Electrical & Electronic Applications.
- Wide Range of Packaging Options.

CLASSIFICATIONS:

AS 1834 Part 1 50Sn

COLOUR CODE & IDENTIFICATION:

Cored Wire Reels - Orange Label.
Sticks - Marked 50/50.

JOINING PROCESS:

Soldering only.
SOLDERING IRON bit temperature: 272°C.

TYPICAL ROD ANALYSIS:

Sn:	**50% (Tin)**
Pb:	**50% (Lead)**

TECHNICAL DATA:

Tensile Strength:	**45 MPa**
Shear Strength:	**40 Mpa**
Approximate Melting Range:	**183-212°C**
Electrical Conductivity:	**10.9% IACS**

DESCRIPTION AND APPLICATIONS:

COMWELD 50/50 Solder is a higher quality general purpose solder for general sheet metal work, and plumbing (not water pipes) applications where better free flowing characteristics are important.

The Resin Cored COMWELD 50/50 solder is especially suited for electrical and electronic work where residues which remain after soldering are non-corrosive and non-conductive.

PROCEDURE FOR SOLDERING:

1. Thoroughly clean all areas to be joined of foreign material.
2. Apply COMWELD 965 Soldering Flux (321890) to the work area. If using flux cored solder this will be automatic at step four (4).
3. Heat the work surfaces directly by the use of a soldering iron or indirectly by the use of a soft gas flame, such as LPG. Do not overheat.
4. Apply solder to the work area. The molten solder should easily flow and be evenly dispersed in the joint area. Do not over fill with solder.
5. Remove heat source and allow to cool naturally until solder returns to a solid state.
6. Remove all flux residues with water.

DESCRIPTION AND APPLICATIONS:

CCOMWELD 'RESIN-CORED' solder wire is suitable for safe use on electrical and electronic work such as computers, video recorders, televisions, telephone and telecommunications equipment and other consumer goods without the need to remove the flux residue. The RESIN residue remaining after soldering is non-corrosive and non-conductive and as such means that there cannot be any damage to delicate electrical wires and no new electrical paths can form to cause short-outs or electrical malfunction of the equipment.

The flux inside COMWELD 'ACID-CORED' wires does not actually contain acid, but the name is given to this flux because it has been formulated to provide a higher level of chemical cleaning action and fluxing activity needed to remove oxide and oxide skins from hard to solder metals such as heavily tarnished copper, copper alloys and difficult materials such as stainless steels that the relatively mild RESIN type flux could not cope with. The flux residues of the ACID-CORED wire are to some extent corrosive and, as such should not be used for electrical work. If possible we recommend that the residues be washed off with water (preferably warm) after soldering.

PACKAGING DATA:

ROD / WIRE SIZE (MM)	PACK SIZE	PART NO.
12(W) x 6(b) x 400 (L)	250g Stick	322306
3.2	250g Acid Solid Wire	322310
1.6	250g Acid Core Wire	322317*
1.6	250g Resin Core Wire	322310

*For enhanced performance and properties, this item is supplied as 60/40 (AS1834.1 60Sn).