



## Eutectic ThinFlo 157

Thin flowing silver bearing lead free solder

### Description:

E+C ThinFlo alloy containing silver but no lead or cadmium, and particularly recommended for applications in the food processing industry.

The mechanical properties of assemblies made with E+C ThinFlo 157 are superior to those of any conventional (lead-tin) alloys, making it especially preferable in harsh service conditions.

High fluidity, full joint penetration.

Very low heat input.

Distortion-free joints.

Assembly of dissimilar metals.

Excellent corrosion resistance.

Compatible with subsequent galvanisation treatment

Easy to use, for increased productivity

Recommended for mass production applications

Economically low density

### Base metals:

Stainless steels, copper alloys, ferrous metals, nickel and alloys, zinc, lead, precious metals.

**Deposit colour:** Silver grey.

### Technical data:

Working temperature (°C): .....230

Melting range (sol.-liq.) (°C): .....220-240

Shear strength (N/mm<sup>2</sup>): .....35-45  
(DIN 8526 standard test value)

Resistivity (μΩm): .....0.12

Recommended clearance (mm): .....0.05 - 0.1

### Applications:

Its excellent wetting properties are ideal for tight, strong joints as required for Maximum Safety Margin (MSM) maintenance and repair applications.

### Specific industries:

Food processing, chemical, air conditioning and refrigeration, micro-technology and general engineering, electronics, household appliances, plumbing and other building installations.

### Main applications:

Tubular assemblies, copper and stainless steel piping.

Fabrication of filters and washing installations.

Heat exchangers.

Manufacture of medical and surgical equipment.

Manufacture of measuring instruments.

Electronic components, waveguides, electrical contactors.

Manufacture of liquid mixing batteries.

Manufacture of household articles and kitchen equipment.

Artistic works.

### Procedure for use:

#### Preparation:

Clean joint surfaces, eliminating all trace of grease and oxides.

Round off corners slightly, and sharp edges.

Apply 157 Flux to whole joint area and on the E+C ThinFlo filler rod.

If necessary, secure components in place for exact gap distance.

#### Torch procedure:

Neutral or slightly carburising flame. Heat assembly slowly, making sure components have same temperature.

On reaching the working temperature (slight bubbling of flux), melt the required amount of alloy with steady heat input. The alloy will flow towards the area of greatest heat.

Avoid concentrating flame on alloy.

Do not overheat.

Do not inhale fumes.

Other heat sources may be used, such as furnace, HF. soldering iron, etc.

#### Removal of flux residues

Allow the assembly to cool.

Carefully remove flux residues with hot or cold water, brushing if necessary and not neglecting areas of difficult access, to avoid any risk of subsequent corrosion.

Dry the assembly.

#### Main fluxes recommended:

157 (liquid) for stainless steels, (ferrous metals in thin sheets, copper alloys).

682 (liquid) for nickel alloys

808 (liquid) for copper alloys, non-corrosive residues.

#### Storage:

In original packing and in dry atmosphere.

# DIGITALWELD

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