

Low Heat, Self-Fluxing Copper-Base Alloy

EutecRod[®] 180

- High wettability and fluidity
- Low melting point
- Excellent joint electrical conductivity
- Strong, ductile, leak-proof joints
- Good corrosion resistance
- Designed for brazing copper and copper alloys

EutecRod® 180

EutecRod 180 is a high strength, silver-free alloy for thin flowing application on thin-walled and intricate copper and copper alloy parts.

Excellent for use on lap, tee, square butt and flange joints, thin and dissimilar gauges. Self-fluxing on copper. Not suitable for nickel or ferrous alloys. Proprietary EutectoFilm[®] metallic cladding on EutecRod 180 insures an ultra clean surface completely devoid of oxide, which enhances flow characteristics.

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TECHNICAL DATA

Typical Values	
Tensile Shear Strength:	42,000 psi (290 N/mm²)
Electrical Conductivity:	22% IACS
Electrical Resistivity:	7.9 Microhm-cm
Solidus Temp. ¹ :	1310°F (710°C)
Liquidus Temp. ² :	1460°F (795°C)
Max. Brazing Temp.:	1550°F (845°C)
Heating Methods:	Oxy-fuel torch, induction, furnace brazing

¹ The solidus temperature is the highest temperature at which the part remains solid i.e. the start of melting.

² The liquidus temperature is the lowest temperature at which the part is molten i.e. complete melting.

PROCEDURE FOR USE

PREPARATION: Clean joint area with RotoClean OS or use a proprietary VOC-free solvent. Align parts and preheat locally to facilitate quicker joint area heat-up. When brazing copper to brass or bronze paint joint area and rod with FloTectic Flux 110.

TECHNIQUE: Use a 2x carburizing flame to prevent oxidation. After preheating, deposit filler metal using a continuous "drop-and-melt" technique.

Note: EutecRod 180 is very fluid. Make sure joint gaps do not exceed 0.005". Continue until the joint is slightly overfilled.

Note: When using a flux any "glassy" residue can be readily removed by light scraping.

POST-BRAZING: If necessary, parts can be cooled in water.

TYPICAL APPLICATIONS

Armatures

Bus BarsCooling Coils

Bottling Equipment

• Brewery Equipment

• Electrical Connections

Water Cooler Wiring

- Refrigeration Equipment
- Air-Conditioning Equipment
- Heaters
- Heat Exchangers
- Motors
- Plumbing
- Radiators
- Railroad Equipment
- Flexible Tubing
- Generators



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