

Robotfactory

COPPERFACE – EASY AND FAST ELECTROPLATING



The widespread use of 3D printing in recent years, in almost all productive-industrial sectors and hobby, it led quickly to a new need: coat the surfaces of the 3D printed objects, with a metallic coating. This is due to functional requirements (to protect the surface from abrasion, from the weather or better to harden the surface) and, the most of the times, simply to aesthetics.

CopperFace is the small galvanic machine, engineered and produced by **Robot Factory**. It is **quick** and **easy** to use for the metallization of all materials.

The versatility of the **CopperFace** system can revolutionize your creativity, because it can be used to electroplate (copper electroplating) an incredible variety of materials. It's perfect for **any plastic material, catalyzed resins, wax, iron, brass, copper, glass, ceramic, ...pasta, lace, dried fruits, etc.**

After the 'copper' electroplating, the same system can be used for finishing using a lot of different metals (**Gold, Rhodium, Silver, Palladium, Nickel**, etc.).



CREATIVITY: With **CopperFace** it is really easy find inspiration for new ideas, because the system was brilliantly designed to electroplate in a few simple steps and cheaply any material.

If until now you have gave up to metallize your design objects, because too expensive to employ a galvanic laboratory, or because you do not have all the necessary equipment, **CopperFace** is the choice for you, because it supplies you everything to do it.

The **CopperFace** system has been designed knowing that the 'plastic' materials are no-conductive and therefore to be able to metallize an object in '**plastic**' it is necessary that before being deposited on it a conductive substrate (graphite, silver, etc.) that allows, in a second phase, the metallization by electrolysis.



OPERATION: The main goal that was reached in the design of the **CopperFace** system, it is the facility of use. Compact design, stainless steel structure, each functions settable by hand, liquids (consumables) ready for use, easy to clean, etc.

The process of 'metallization' with the **CopperFace** system, is particularly simple and allows you to deposit a metal surface on plastic models obtained by 3D printing, but also on small objects of any other material, also **no-conductive materials!** ... Because, once the materials has been made conductive, using an appropriate spray

that forms a uniform smoothed layer of conductive material (**Graphite and/or Silver**), you can perform electrodeposition treatments on them, as well as on metallic materials.

For the electrolytic phase, it is used an acid solution with metal salts **ready to use**. Once started the magnetic stirrer by adjusting the supply current according to the surface of the object (about **1A – 1.5A** for dm^2), the potential difference that is generated inside the glass tank between the cathode (object) and the anode determines the deposition of the metal on the surface of immersed object (approximately, **1 μm** is deposited **every 2 minutes**). At the end, you have to remove the object from the bath tank, wash it with water and dry gently with a soft cloth.



MATERIAL SUPPLIED WITH KIT:

- ✓ **Costant current power supply**
- ✓ **Glass tank with a suitable size to contain the anodes and the model**
- ✓ **Phosphorus copper anodes**
- ✓ **Acid solution of copper sulphate ready for use**
- ✓ **Magnetic stirrer with the function of supporting the glass tank (complete with stir bar)**
- ✓ **Conductive spray**
- ✓ **Disposable gloves for part handling**
- ✓ **Abrasive sponge for cleaning the anodes**



TECHNICAL SPECIFICATIONS:

Dimension **stirrer**: 155 x 153 x 290 mm

Dimension **power supply**: 205 x 85 x 160 mm

Glass tank capacity: 1000 ml

Suggested workpiece max size:

- using standard anodes: 35-40 cm^2
- using double anodes: 75-80 cm^2

Power supply: 230v 50-60Hz

Declaration of **EC conformity**.

1 (one) year of warranty.



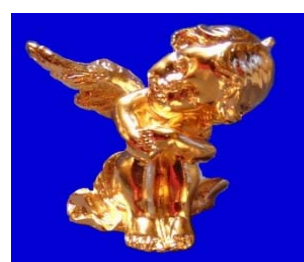
Copper Plated



Rhodium Plated



Silver Plated



Gold Plated

MADE IN ITALY

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