



CATALOGUE



LE CUIVRE

Solutio Perfecta: the alchemy of copper in modern industrial processes.

● La nostra storia

In **1958** Ferruccio Levantini laid the first foundations of "Cuivre" in a small laboratory in Bresso which, only two years later, was expanded and moved to its current headquarters in Via De Amicis in Cinisello Balsamo.

In **1979** "Cuivre" changed its name to today's "Le Cuivre", evolving its corporate structure and areas of expertise, specializing itself in mechanical machining of copper components, special bronzes and moving beyond Europe to international markets including Asia and Africa.

For over 60 years Le Cuivre has been operating in semi-finished copper and its alloys' sector: production begins with use of certified billets, touching all processes such as forging, stamping, rolling and mechanical processing.

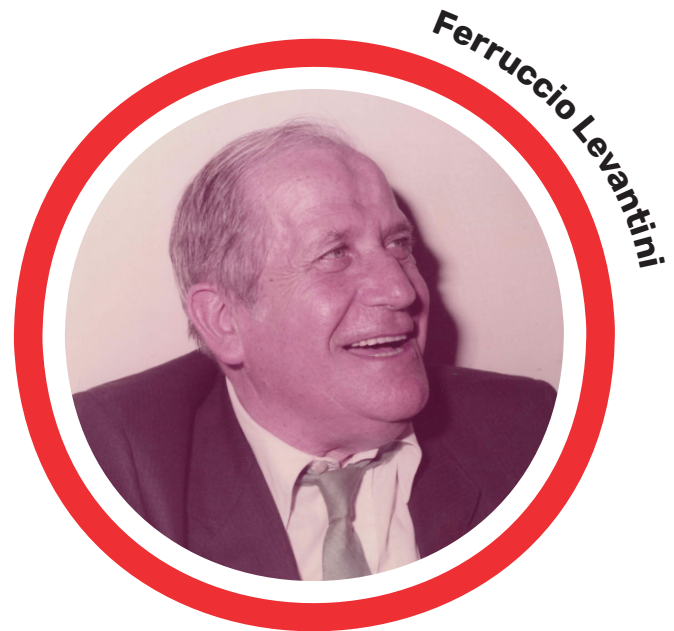
All our processes are guaranteed by a careful choice of raw materials and UNI **EN ISO 9001:2015** certifications

Le Cuivre srl,
the **Solutio** Perfecta for your projects.



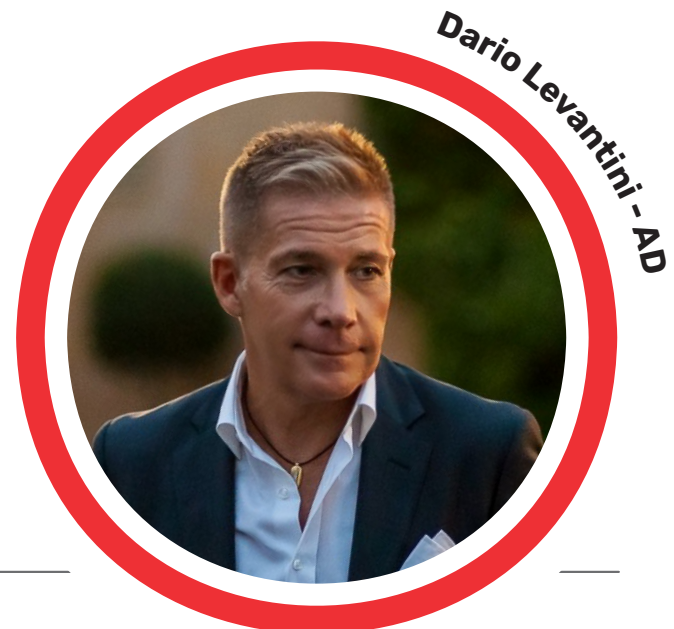
● Vision

We strive every day to make the best version of our customers' projects.



● Mission

Our experience allows us to look to the future and improve our performance, but with reliability and care for detail ever.



● Our services

Le Cuivre has been producing electrolytic copper, high conductivity copper alloys and special aluminum bronzes for Italy and abroad since 1958.

The fully integrated production cycle starts with the use of copper-based master alloys up to semi-finished and finished products, intended for various industrial sectors such as:

- Steel industry
- Elettromechanic
- Resistance welding
- Die casting and mould for gravity casting
- Moulds for plastic material
- Nuclear research

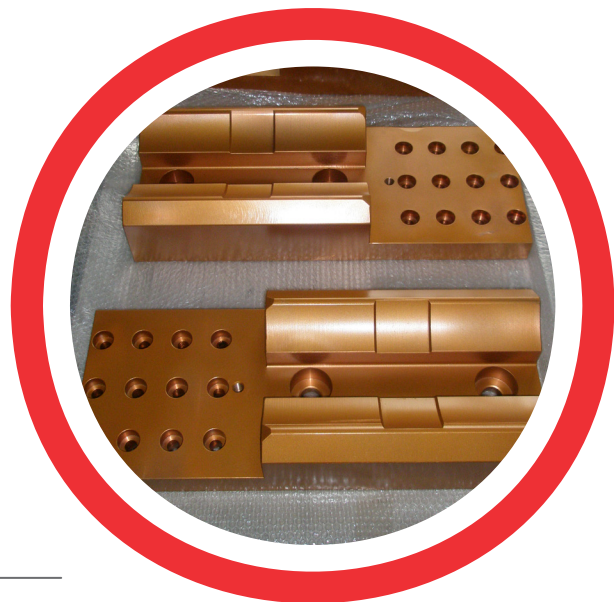




Steel industry

Le Cuivre also produces spare parts and equipment in CUEtp 99.9% and CU.Of copper for arc furnaces.

In the steel industry, Le Cuivre produces components and products used in production and processing of steel, from arc melting furnaces to rolling mills, in collaboration with major Italian plant manufacturers and with the main producers of semi-finished steel products for the supply of spare parts and accessories.



These are some of main products:

- Contact plates and electrode holders in Cu Of
- contacts parts made in copper carpentry with certified welding
- cooled plates in casting or forged copper
- casted or forged cooling blocks up to 1000 kg
- shunts and electro-welded flexible connections
- welding parts and elements for sheet metal rolling
- welding wheels for rolling mills
- Forming rolls in bronze aluminum for rolling mills
- sliding elements in aluminium bronze for rolling mills



Electromechanic

Le Cuivre has always supported partnerships with the most important companies in the electromechanical sector, manufacturing components and spare parts.

These are some of the products:

- Contact bars for transformers
- Copper components and connections for special machinery
- Connections and terminals for electrical cables
- Cu-Of and CuCrZr short-circuit rings
- Electrical contacts
- Flanges, supports and various contacts (medium and high voltage)
- Forged, hot forged and castings parts



Resistance welding

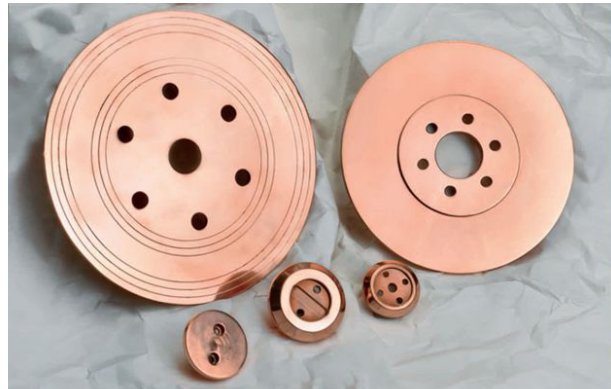
A relevant part of our production is used in the field of resistance welding: the alloys mainly used in this sector are:

CuCrZr, CuCoNiBe, CuCoBe and CuNiSiCr that guarantee optimal electrical and thermal conductivity as well as high and stable mechanical characteristics up to medium-high temperatures.



These are some of the products:

- Discs, rings and electrodes for resistance welding
- Electrode holders and arms for automatic and manual welding guns
- Electrodes and components in copper and copper alloys for special welding systems
- Roller bearing shafts and heads for roller welding machines
- Forged, drawn and rolled bars in copper, copper alloys and special bronzes



Die casting and mould for gravity casting

The alloys used are CuCoNiBe and CuCrNiSi, coming from certified billets.

- pistons for die casting

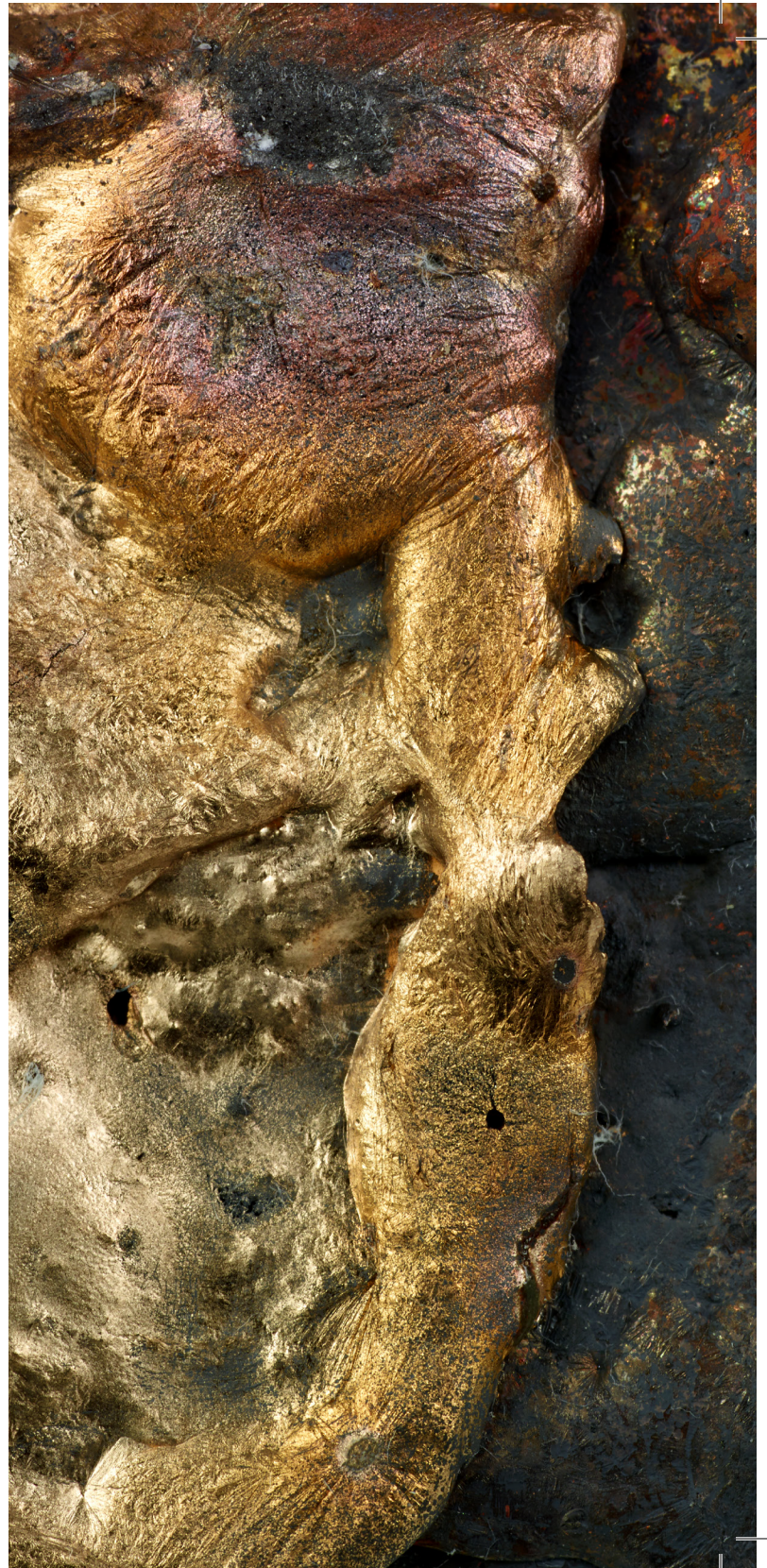
This type of copper alloy piston has replaced the traditional steel ones thanks to the high thermal conductivity which still retains the mechanical characteristics.



- casting shells

The alloys we use, such as CuCoNiBe, CuBe 2% and CuCrNiSi, are also used in the production of casting moulds for taps and valves. These alloys are used as an alternative to steel thanks to their properties:

- high mechanical characteristics: hardness and tensile strength
- high thermal conductivity, good corrosion resistance, ability to counter the aggressive attack of brass, faster casting cycles, high performance, longer life and better surface quality of the product.





Moulds for plastic materials

The alloys used in the production of molds for plastic materials are: CuCoNiBe, CuBe2% and CuNiSiCr. Semi-finished products are produced in Cinisello Balsamo's plant and all the alloys are used according to their mechanical and physical properties:

- good thermal conductivity
 - high mechanical characteristic
 - resistance to wear hot corrosion
-
-

Performance increases thanks to a faster cooling speed of the mold and its components given the better heat exchange of copper alloys compared to steel.

These are some among products produced:

- mold parts and complete molds
- hot spot inserts in CuCoNiBe and CuNiSiCr
- nozzles and needles for blow molding and injection molding
- electrodes for EDM



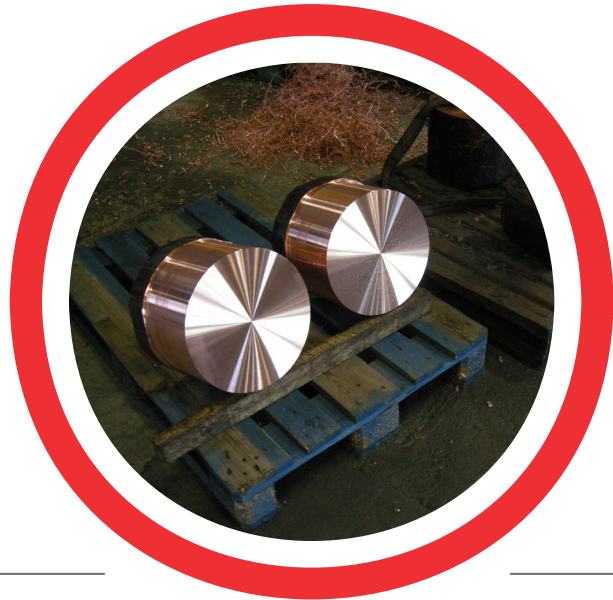
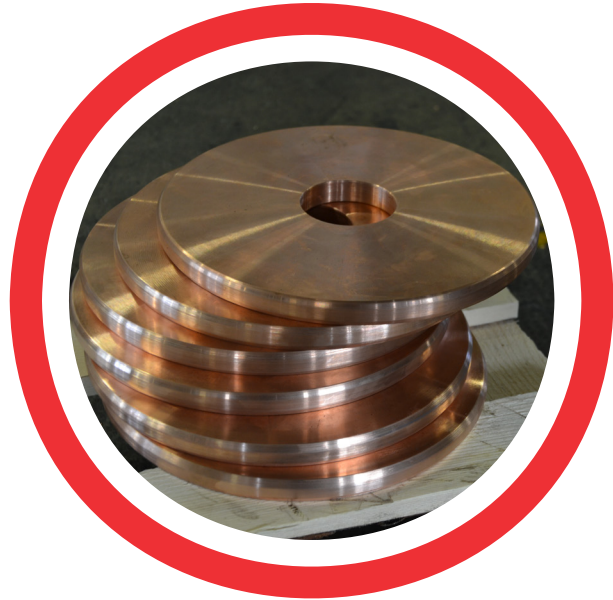
Nuclear research

Le Cuivre Srl has been producing semi-finished and finished parts in copper and copper alloys with high conductivity since 1958, managing the entire production range, from forging and rolling to final processing based on the customer's drawing with our CNC machinery.

The materials used in Nuclear research are Cu-OFE and Cu-OF, (C10100 and C10200) and high conductivity alloys such as CuCrZr.

We are specialized in 3D forging with multidirectional reduction technology to ensure the best structure and smaller grain size on the forged parts.

The capacity of the forge is up to 1200 kg.



Our two hydraulic presses are 1500 tons and 1000 tons power; we also use computer controlled gas furnaces for pre-heating and thermal treatments.

Our products are used in nuclear research, in energy production and in the electromechanical industry and in these markets we cooperate with major companies in Europe and in the world. Le Cuivre Quality System is certified according to the ISO 9001: 2015 standard.

Applications in nuclear research include:

- vacuum components
- RF Cavity
- components for particle accelerators and synchrotron machines

In our laboratory we also perform mechanical and non-destructive ultrasonic tests, with penetrating liquids, electrical conductivity and chemical analyses.





Solutio Perfecta:
Solutio Perfecta: the alchemy of copper in modern industrial processes.



Le Cuivre srl
Via De Amicis, 40
20092 Cinisello Balsamo - MILANO
+39 02 66049134 - sales@lecuivre.com

lecuivre.com