

**Innovation, quality** and **safety** at the service of selected customers.  
**Flexibility and transparency** at every stage of product development, punctuality, **reliability** and **maximum customisation** of all the solutions.

Your partner of excellence for the development and delivery of technologically advanced, high value-added solutions



**Vergato (BO) plant**

*Registered office*

Via Molino Malpasso 65

40038, Vergato (BO)

+39 051 674 0082

pietrogalliani@pietrogalliani.com

**Grizzana Morandi (BO) plant**

*Operational headquarters*

Località Campiario 131

40030, Grizzana Morandi (BO)

+39 051 674 0082

pietrogalliani@pietrogalliani.com

[www.pietrogalliani.com](http://www.pietrogalliani.com)



## Batteries

Copper and copper alloys

Silver

Aluminium

# Silver, copper and copper alloy foils, aluminium laminated foils

## PRODUCTS

**Copper foils:** used in new generation lithium-ion batteries.

**Silver foils:** produced for special batteries requiring specific electrochemical reactions.

**Copper alloy foils:** used in batteries that have to withstand extreme mechanical and thermal stress.

**Aluminium laminated foils:** used as multilayer casings to ensure cell safety.



## Applications

- Li-ion
- Military batteries
- Special batteries
- Supercapacitors

## Service

We accept orders for even the smallest production quantities and guarantee our customers fast and reliable delivery times. We offer customised solutions, designed and developed to express the proper characteristics and suit unique production cycles.



Product	Material	Thickness	Formats	Mechanical properties	Surface
Ag	Silver (up to 99.99% purity with impurity control in PPB); perfectly degreased surfaces suitable for coating	Thicknesses from 8 my; thickness tolerance up to +/- 3%; minimum width 1 mm	Plastic flanges available for each coil; coils also available in reduced widths; customised shapes available on request	Hard foils with HV> 75 Mechanical properties with narrow tolerance ranges for special applications.	Specular surface with very low roughness level; the absence of surface impurities guarantees the highest level of polishability; anti-scratch protection film available
Cu	Different types of copper available depending on the required properties	Thicknesses from 8 my; thickness tolerance depending on alloy type	Packaging made of vacuum rolled barrier; on request protection against oxidising agents, barrier bag and other special packaging.	Tensile strength up to > 800 MPa Guaranteed mechanical resistance up to 200°C	<b>Low roughness (&lt;0.1my Ra)</b> Tin plating and silver plating on request
Cu Alloy	4 types of brass (CuZn) 2 types of bronze (CuSn) 2 types of nickel silver (CuNiZn) Other special alloys with high heat resistance	Thicknesses from 8 my; thickness tolerance depending on alloy type	Packaging made of vacuum rolled barrier; on request protection against oxidising agents, barrier bag and other special packaging.	Tensile strength up to > 800 MPa Guaranteed mechanical resistance up to 200°C	<b>Low roughness (&lt;0.1my Ra)</b> Tin plating and silver plating on request
Al	Different alloys available on request	Fully customisable thicknesses down to a tenth of a micron	Slit pads with max. 1m outer diameter; coils with max. 480mm outer diameter (tape length > 100km in some cases).	Fully customisable mechanical properties on request	Surfaces suitable for surface processing and coating