



LAMIFIL

ADDITIVE MANUFACTURING
HIGH PERFORMANCE COPPER ALLOY WIRES

ADDRESSING PRODUCTION CHALLENGES FOR ADDITIVE MANUFACTURING

Additive manufacturing is continuously evolving, with a growing demand for optimized production processes that ensure safer, more efficient, and high-quality outcomes. Our custom copper alloys are specifically engineered to meet the needs of additive manufacturing applications, where high purity, conductivity, oxygen content and thermal resistance are essential. These high-quality alloys used to produce powders provide the foundation for advanced 3D printing processes, resulting in superior products and innovative solutions.

Lamifil forges over 95 years of technology, innovation and mastery into smart wires to bring connections to life. Our proprietary copper alloys, including PowerFil®, empower manufacturers to achieve reliable, consistent results in even the most demanding additive manufacturing environments.

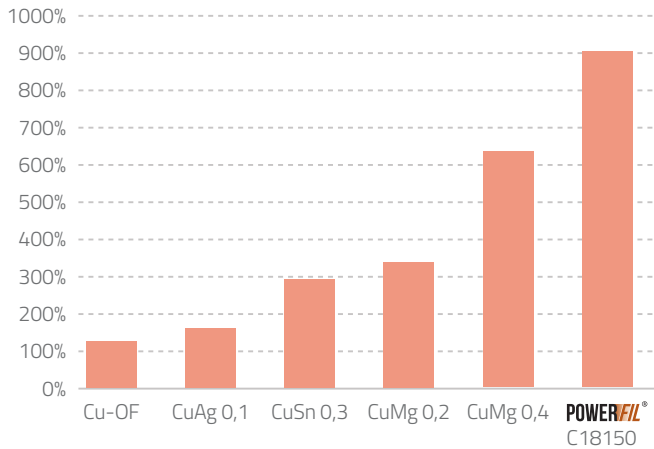
Our copper alloy wires used to produce powders are fully compatible with leading additive manufacturing processes such as Laser Powder Bed Fusion (LPBF), Electron Beam Melting (EBM), and Directed Energy Deposition (DED).

KEY BENEFITS

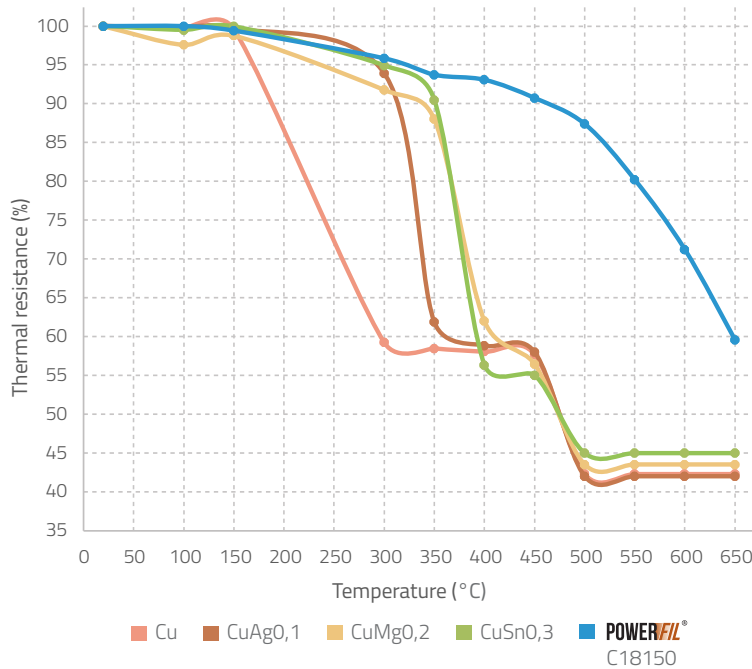
- > **Oxygen Free Content**
Our alloys are cast in an inert atmosphere, allowing them to have an extremely low oxygen content of < 5ppm. This is particularly crucial for copper alloys, which are very sensitive to oxygen.
- > **Ultra-High Purity**
Our copper alloys deliver superior electrical and thermal conductivity, making them ideal for high-performance applications such as electronics, energy systems, and heat exchangers.
- > **Outstanding Electrical Conductivity**
With exceptional electrical conductivity, our copper alloys are perfect for producing powder for electrical components like contacts, connectors, and RF systems with optimized performance.
- > **Exceptional Thermal Conductivity**
Alloys are the number one choice for high temperature applications. In high-temperature and extreme conditions, our alloys maintain their mechanical and electrical properties.
- > **Excellent Spherical Shape**
The spherical particles - made with our alloy wires - offer excellent flowability and packing density, making them ideal for powder bed fusion and other additive manufacturing processes.



COMPARISON OF THE FLEXLIFE

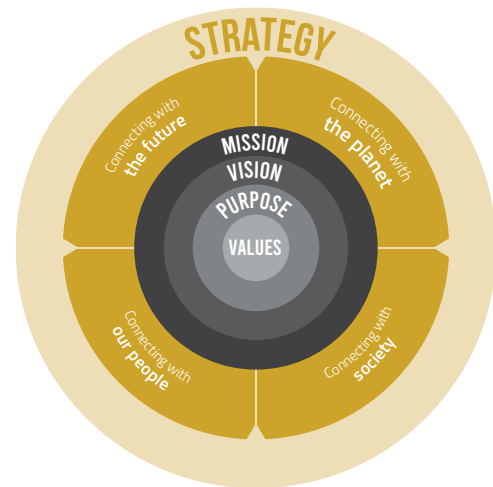


THERMAL RESISTANCE OF COPPER ALLOYS



FLEXIBLE SERVICES

Want to find out how our copper alloys can help you to improve your end products and production processes? We advise you, work with you to develop products tailored to your specifications. We rigorously test them in our fully accredited lab at every step in our production process. Our commitment goes beyond the product, as we respond to your specific requests for packaging or transport.



More information about our sustainability approach



CONTACT US

To find out more on the benefits of our alloys, visit our website www.lamifil.be, scan the QR code or get in touch with our team: E: info@lamifil.be T: + 32 (0)3 8700 611

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