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Metal powder for laser-based powder bed fusion

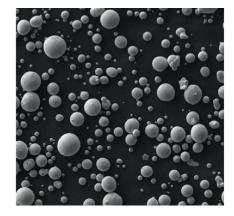
Description, properties and application

m4p™ PureCu is a metal powder made of high-grade copper, which due to its material stands out by excellent electrical and thermal conductivity and is theoretically only surpassed by elemental copper or silver. Due to these properties, which are effective for the application, processing in the PBF process is only recommended in combination with suitable sintering and melting plants and special parameter sets in order to achieve low component porosities.

Components made from **m4pTM PureCu** also feature a high ductility and corrosion resistance to aqueous solutions and non-oxidizing acids. Conversely, the suitability for use or post-treatment in reducing atmospheres (e.g. annealing in a hydrogenous atmosphere) generally has to be tested for the individual case.

The main applications for **m4pTM PureCu** can be found particularly in the field of electrical engineering and electronics but also comprise heat-dissipating components.

Powder characteristics



Chemical analysis [wt%]		
Element	Min	Max
Cu	99,95	-

Particle size Laser PBF

GERMANY

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