BinNova Metal Fiber Technology
BinNova Metal Fiber Technology (MFT)

Our vision is to be the leading manufacturer of metallic fibers less than 10 micrometer in width and sheet materials made from various metals and metal alloys at attractive costs in large quantities.

Our mission is to develop very fine metallic fibers and 2D/3D fibrous structures, customized for advanced technical applications. BinNova Metal Fiber Technology GmbH (MFT) started in 2015 as a wholly owned subsidiary of BinNova GmbH & Co. KG.

MFT collaborates with a leading German research institute on the development of metal microfibers since long. Today's applied and patented process technology was jointly developed. MFT is located in a Technology and Innovation Park in the city of Jena. Jena has a long history in materials science and technology.

Fibers

Our focus is on metal fibers with diameters from 1 µm to 10µm.

- Our product range covers fibers from different metals and alloys, e.g. Aluminum, Copper, Gold, Silver, Zinc, Stainless Steel, Co- and Iron-based alloys.
- Due to our novel process technology also fibers made from very special alloys can be produced with excellent elasticity, corrosion resistance and high strength. All MFT micro metal fibers provide high surface to volume ratios.
- Unique electrochemical and mechanical properties offer advantages for applications in filtration, catalysis, electromagnetic shielding, battery technology, etc.
- For filtration applications at elaborated temperatures and in harsh environments, mechanical stability and corrosion resistance are important. In combination with electrical/thermal conductivity and specific surface properties, metallic sheet materials offer innovative technical solutions.
Sheet Materials

MFT sheets are made from MFT fibers only, with the following properties:
- Membrane like character
- Purity, no binder/additive or other contamination
- Adjustable porosity and density, basis weight, thickness

Additionally, it is possible to manufacture hybrid materials by combining metal fibers with glass or synthetic fibers.

Reinforced Sheet Materials

For high stiffness and strength, the base sheet material is sintered. This thermal treatment provides good mechanical stability without compromising purity (no adhesives, binders or additives).

Gradient Density Sheet Materials

Layers of fibers with different diameters can be combined to obtain gradient density porous structures. The number of layers is almost not limited.