

## MT-COPPER

MT-COPPER is our 80% copper filled filament which is easy to print, sand & polish. With MT-COPPER you can create the most beautiful objects with real METAL characteristics, such as a 3 x higher weight than PLA, a METAL feel & touch and thermo-conductivity. Due to the high percentage of fillers MT-COPPER has virtually no shrinkage. A special lubricant increases the flow and prevents MT-COPPER to adhere to the nozzle. Finally all above combined with the correct hardness results in a filament that can be printed on almost every type of FDM 3D printer available on the market with retraction enabled on nozzles  $\geq 0.35$  mm.

### Material features:

- Approx. 80% copper content
- PLA-based, 3 times heavier
- Metal feel & "cold" touch
- Excellent printability on both direct & Bowden style 3D printers
- Processing additive added for easy & reliable printing
- Quick & easy polishing and other post-processing
- Possibility to print with retraction
- Works on nozzles  $\geq 0.35$  mm

### Filament specs.

Size	Ø tolerance	Roundness
1,75mm	$\pm 0,05$ mm	$\geq 95\%$

### Material properties

Description	Testmethod	Typical value
Specific gravity	ISO 1183	3,41 g/cc
MFR 190°C/2,16 kg	-	n.a.
Tensile strength at yield	ISO 527	18,3 Mpa
Strain at break	ISO 527	4,5%
Tensile Modulus	ISO 527	4210 Mpa
Impact strength - Izod method 23°C	ISO 180/A	9,3 kJ/m2
Printing temp.	DF	210 $\pm$ 10°C
Melting temp.	ISO 294	195 $\pm$ 10°C
Vicat softening temp.	ISO 306	65°C

### Additional info:

MT-COPPER can be printed without a heated bed, but if you do have a heated bed the recommended temperature is  $\pm 35$ -60°C. Storage: Cool and dry (15-25°C) and away from UV light. This enhances the shelf life significantly.

MT-COPPER can be used on all common desktop FDM or FFF technology 3D printers.

\* Please consider the use of a hardened steel nozzle when printing with MT-COPPER.

The copper powder inside makes the filament abrasive and will result in fast wear of regular brass nozzles.

\* Please have a look at the Printing, post-processing & other info document for further tips & tricks.