Metal PLA 3D Filament

Print in 3D and create prototypes, spare parts, quick and on-demand production, etc. in any shape or geometry. Gearlab 3D Filaments come in different plastic materials and with varying properties.



Gearlab Metal PLA 3D Filament

Metal PLA Polylactic acid is a biodegradable polymer derived from non-GMO corn starch combined with fine metal powder. Metal PLA filaments contain copper, bronze or aluminium that create printed models with a metal texture which can be sanded and polished to a high luster.

The metal powder makes the filament heavier, so despite using the same settings and consuming the same amount of material, the metal PLA printed parts will weigh significantly more than the ones printed with standard PLA.

Due to the heavy nature of this material, metal-filled filaments typically do quite poorly when printing overhangs or bridges.

Metal PLA filaments tend to be very abrasive when extruded, so a standard brass nozzle will quickly become worn down. Be sure to upgrade to a wear resistant steel nozzle in order to print this filament effectively.

Properties

Diameter	1.75 mm
Tolerance	0.05 mm
Weight	1 kg
Printing temperature	180-220°C
Printing speed	60-90 mm/s
Layer resolution	0.2 mm
Hot bed	45-60°C optional
Printing raft	Not required
Printing substrate	Not required
Tensite strength	≥ 50 Mpa
Impact strength	≥ 3 KJ/m
Elongation at break	≥ 2%
Distortion temperature	≥ 50°C

Features

- Environmentally friendly, bio-degradable polymer
- Smoke- and odour-free printing
- Easy to print filament with stable printing size and low material shrinkage
- Enhanced post-print workability



IF YOU CAN DREAM IT, YOU CAN PRINT IT!