



BCN3D releases the new Metal Pack to pave the way for stainless steel printing

- *BCN3D responds to the industry's growing demand to produce stainless steel parts, mainly within the pharmaceutical, food, automotive, aerospace, and manufacturing sectors.*
- *The new Pack enables metal 3D printing to compete directly with current technologies MIM and CNC, offering similar mechanical properties and far more design freedom.*
- *The BCN3D Metal Pack has been developed with Ultrafuse® Metal Filaments from Forward AM, the brand of BASF 3D Printing Solutions, to be presented at Formnext 2021 in Frankfurt.*

Barcelona (Spain), November, 10th, 2021.- BCN3D, a leading 3D printing solutions manufacturer, has launched its Metal Pack - containing *Ultrafuse® Metal Filaments* from Forward AM - for its line of Epsilon Series 3D printers.

The development allows its customer base to easily upgrade their hardware to catch up with the latest developments and affordably produce solid metal parts.

The upgrade opens up a new range of applications for BCN3D customers, especially for spare parts, functional prototyping, and tooling, and is mainly aimed at the pharmaceutical, food, automotive, aerospace, and manufacturing sectors. The parts produced by this process have practically identical behaviour to those produced by MIM or CNC and offer an office-friendly solution with far more design freedom.

The Metal Pack includes both *Ultrafuse® 316L* and *17-4 PH*, and a new exclusive hotend for metal, as well as specific accessories, to ensure a smooth printing experience. After the printing process, debinding and sintering processes can be done externally through the current Forward AM authorised network of service suppliers.

Eric Pallarés, CTO of BCN3D, said: "The whole AM industry is chasing metal 3D printing. But the truth is that, nowadays, affordable available solutions, if any, are very scarce. With the release of the Metal Pack at BCN3D, we are excited to leverage BASF's decades of experience in MIM technology applied to metal extrusion and post-processing. In combination with our existing 3D printing ecosystem, it becomes an end-to-end and accessible solution for functional prototyping. Our customers will be able to take the best advantage of 3D printing by obtaining industry-grade metal parts, within days."

Firat Hizal, Head of Metal Systems Business Group at BASF 3D Printing Solutions GmbH, added: "The *Ultrafuse® Metal Filaments* portfolio has been developed based on BASF's decades of know-how coming from the Metal Injection Moulding (MIM) industry. Filaments are designed for ultimate ease of handling and can be used on any open-source Fused Filament Fabrication (FFF) printer. We are very happy that both *Ultrafuse® 316L* and *17-4 PH* are validated by BCN3D and BCN3D decided to enable its user base by introducing this bundle."

The printing process is divided into three steps: printing a part with the BCN3D Epsilon 3D printers, followed by industry-standard debinding and sintering, which is done externally through the current Forward AM authorised network of suppliers. The result is a final part which is nearly 100% solid stainless steel.

For the printing process, filaments Ultrafuse@ 316L and 17-4 PH contain high levels of stainless steel in combination with polymer binders which allows for easy printing. The binder content from the printed part is removed in a catalytic debinding process. The next step is the part undergoing a subsequent sintering process at temperatures right below the melting temperature of the metal which causes the metal particles to coalesce. The material then reaches its final properties through post-sintering. For example, achieving required performances in aspects such as hardness and strength.

The Metal Pack will include one Ultrafuse@ 316L (3kg) spool and one Ultrafuse@ 17-4PH (3kg), the Magigoo 316L which is also compatible with the 17-4PH, two new Hotend M's and the new BCN3D Brass Wipers for Metal. BCN3D will also publish an add-on for new slicing software BCN3D Stratos dedicated to printing with metal that will include printing profiles curated for the BCN3D Epsilon Series.

The first units of the Metal Pack will be shipped in January 2022 and the pack will make its official debut at the most relevant trade fair in the sector, FORMNEXT (November 16th-19th), at the BCN3D Booth 12.1 B41.

Access the Metal Pack photos [here](#)

About BCN3D

BCN3D is one of the leading developers and manufacturers of 3D printing solutions in the world with an installed base in more than 60 countries. Its main clients include Nissan, BMW, NASA, Camper, Louis Vuitton, and the Massachusetts Institute of Technology (MIT).