BCN3D

BASF
We create chemistry

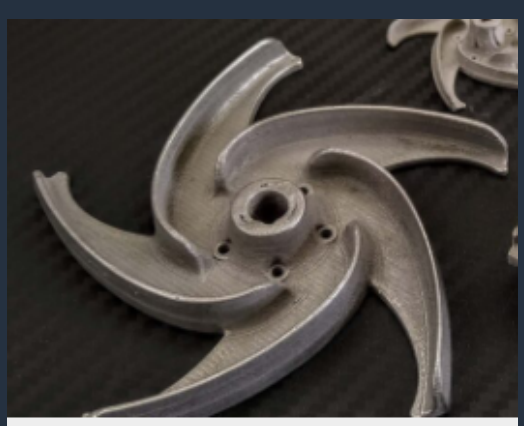
CMG Partnership

DEBINDING & SINTERING

BASF 316L & 17-4PH

Ultrafuse 316L & 17-4PH combines greater freedom of design with a low total cost of ownership. 3D-printed parts acquire their final properties, for example in terms of hardness and strength, through a debinding and sintering process developed by BASF, which has emerged as the industry standard.

A part after debinding and sintering



A finished part that has been polished

AVALIABLE IN 1.75MM & 2.85MM

Ultrafuse 316L is 80% stainless steel and has a 20% polymer content which allows for easy printing on many open FFF desktop printers.

Examples of applications using Ultrafuse 316L:

- Tooling
- Jigs and fixtures
- Series production
- Functional parts and prototypes

Ultrafuse 316L is cost-effective because:

- Our filament works with any open FFF printer, which means low investment cost in hardware
- We make use of a highly efficient and established post-processing technology used in the Metal Injection Moulding (MIM) industry
- As this is a filament, material handling is much safer and very easy. This allows an easy material exchange in comparison to handling with fine metal powders

Filament diameter:	1.75 mm / 2.85 mm
Tolerances:	±0.05 mm / ±0.075 mm
Roundness:	±0.05 mm / ±0.075 mm
Bending radius:	5 ± 1 mm / 10 ± 3 mm
Spool length:	250 m / 100 m
Spool weight:	3 kg / + 3 %

Ultrafuse® 17-4 PH is a filament for the production of metal components on standard Fused Filament Fabrication (FFF) printers. Also referred to as Type 630, this chromium-copper martensitic precipitation hardened stainless steel it is both magnetic and fully heat treatable to high levels of strength and hardness.

Examples of applications using Ultrafuse 17-4PH:

- Tooling
- Jigs and fixtures
- Series production
- Functional parts and prototypes

Ultrafuse 17-4PH benefits at a glance:

- Easy and affordable way of metal 3D printing
- High mechanical strength and hardness
- Good corrosion resistance
- Fully hardened enables highest strength
- Compatiable with D&S post-processing

Filament diameter	1.75 mm / 2.85 mm
Tolerances	±0.05 mm / ±0.075 mm
Roundness	±0.05 mm / ±0.075 mm
Bending radius	5 ± 1 mm / 10 ± 3 mm
Spool length	250 m / 83 95 m / 32 m
Spool weight	3 kg / 1 kg

STAINLESS STEEL COMPOSITE METAL FILAMENTS FOR 3D PRINTERS

Forward AM's Ultrafuse® Metal Filaments are innovative filaments to produce stainless steel parts. They are designed for ultimate ease of handling on conventional Fused Filament Fabrication 3D printers. BASF Forward AM Ultrafuse® Metal Filaments combine greater freedom of design with a lower total cost of ownership – printing metal parts easier, faster and affordable.

3DGBIRE

BCN3D

CMG Partnership

DEBINDING & SINTERING

Begin your journey into Additive Manufacturing with one of our additive experts - whether it be hardware, software, materials, we can help provide you with the perfect solution. The world of additive manufacturing is incredibly complex and diverse with each business requiring a specific solution to optimise the incredible ROI that these technologies can generate.
Materials are the key to unlocking the true potential of Additive Manufacturing and in order to optimise your applications our research and development team will work with to ensure that you can broaden your knowledge of our extensive filament range.

Book your free consultation. Our Additive Manufacturing experts will support you from material selection, application development to the correct design diameters.

BASF
We create chemistry

BASF 316L & 17-4PH

AVALIABLE IN 1.75MM & 2.85MM

PRICE PER APPLICATION.
THIS CAN BE PURCHASED AT THE POINT OF FILAMENT SALE OR ONCE THE APPLICATION HAS BEEN PRINTED

3DGBIRE

3DGBIRE will provide a complete price range for all CMG Debinding & Sintering services

CUSTOMER DECLARATION & CONTENTS FORM

This form must be included in the packaging being sent to CMG

ADDITIONAL 'FINISHING' SERVICES ARE AVAILABLE VIA 3DGBIRE PROVIDED BY CMG

CUSTOMER TO SHIP DIRECT TO CMG

CMG Technologies,
Unit I1, Thompson Drive, Base Business Park, Rendlesham
Woodbridge, Suffolk, IP12 2TZ,
England

CMG

- Parts received
- Parts photographed
- Any queries on design will be communicated directly with the customer

CMG DEBINDING & SINTERING

ADDITIONAL 'FINISHING' SERVICES ARE AVAILABLE VIA 3DGBIRE PROVIDED BY CMG

CMG QUALITY CONTROL PROCESS

CMG will provide photographs of all application before dispatch to ensure customer and partner alignment on quality standards

FINISHED PART

CMG UK will directly ship debound and sintered part directly back to the end use customer

3DGBIRE