bigrep PRO
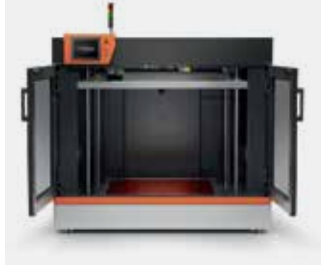

ITERATE FAST. PRODUCE FASTER.
GET TO MARKET FASTEST.

The BigRep PRO is a 1 m³ powerhouse, built to take you from prototyping to production. It provides a highly scalable solution to manufacture prototypes, end-use parts, factory tooling and more with high-performance, engineering-grade materials. Compared with other manufacturing and FFF printing solutions, the PRO can produce full-scale, accurate parts faster and at lower production costs.
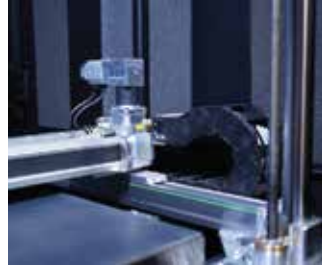
BIGREP PRO KEY FEATURES

Industrial 3D-Printing
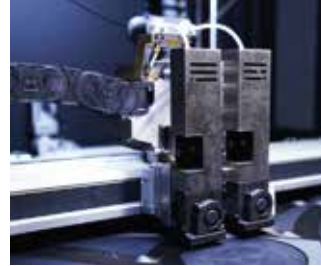The 1 m³ Build Volume

The PRO continues BigRep's tradition of innovation in large-format 3D printing. Designed to print big parts including prototypes, factory tooling, patterns and mold as well as batches of smaller parts, the PRO's fully enclosed 1 m³ build volume ensures consistent print temperatures and safety from hazards on the factory floor.

High Accuracy at High Speeds
The Precisions Motion Portal

The PRO's massive 1 m³ build volume is supported by a durable, custom-built gantry engineered for high speed, fast acceleration, and accuracy. The robust frame eliminates vibrations during printing assuring fast, yet precise movement gliding the extruders along a reinforced carriage system. Powered by Bosch servo motors.

Fast, Precise & Fiber-Ready
Advanced Capability Extruders

BigRep's Advanced Capability Extruder (ACE) expands the material capabilities of the PRO while still reliably delivering quality prints with speed and precision. ACE is a direct drive extruder, perfectly equipped for fiber reinforced materials. With ACE you can print large-format, strong parts 50 % faster than other printers.

JUMPSTART
Skip the Hassle, Just Print.

Using the latest PRO is easier than ever thanks to JUMP-START, a hybrid software-hardware solution. It includes the SWITCHPLATE, a removable and flexible print bed surface, the LOCKSTAGE for easy and secure extruder mounting, and the MXT® Control System that bypasses manual calibration and ensuring optimal first print layers.

TECHNICAL SPECIFICATIONS

Version	**BigRep PRO.2**
Build Volume	**x 1020 y 970 z 985 mm** (x 40 y 38 z 38.5 in)
Layer Height Resolution	**0.3 mm, 0.6 mm** Other layer heights supported through slicer software.
Speed | Acceleration (XY)	**Max. 600 mm/s | Max. 5 000 mm/s²**
Extruders	**Two Fiber-Ready PRO ACE Extruders** Interchangeable hotend with 0.6 mm and 1 mm nozzle.
Printing Technology	**Fused-Filament-Fabrication (FFF / FDM)**
Certified BigRep materials	**HI-TEMP CF, PRO HT, PETG, ASA, PA6/66, PA12-CF** Other filaments upon request.
Support materials	**BVOH** Other filaments upon request
Print Bed Temperature	**Max. 100 °C** (212 °F)
Printer Weight	**Approx. 1 550 kg** (3 417 lbs)
Size (without towerlight)	**x 1 950 y 2 500 z 1 790 mm** (x 77 y 98 z 70 in)
Max. Throughput with 1 mm Nozzle	**130 g/h** (115 cm³/h)
Max Nozzle Temperature	**280 °C** (536 °F)
Nozzle Diameters	**0.6 mm, 1.0 mm**
Safety certifications	**UL, CE, EC Machinery Directive 2006/42/EC Compliant**