# bigrep **STUDIO**



THE LARGE-SCALE SERIAL 3D PRINTER FOR BIG RESULTS, IN A SLIM BUILD



# FAST AND PRECISE LARGE-SCALE 3D PRINTING IS FINALLY ACCESSIBLE IN ONE COMPACT PACKAGE

With the BigRep STUDIO, we introduce a workhorse printer that brings a new dimension to large-scale 3D printing. The print volume of 500 mm x 1000 mm x 500 mm enables continuous printing of large objects in a space-saving package. Because it fits easily through doors, the BigRep STUDIO is optimally sized for set-up in any location.

The direct-drive dual-extruder with a 0.6 mm nozzle has been optimized for both speed and precision, capable of printing flexible materials. The all-metal hot-end allows for printing of a larger variety of high temperature filaments.

Shaped by the winner of the German Design Award 2016, the market-leading BigRep ONE printer, our experts have engineered the STUDIO for professionals across industries to easily and quickly bring their innovative designs to life.

# FAST AND PRECISE - BIGREP STUDIO FOR LARGE-SCALE PRINT PROJECTS

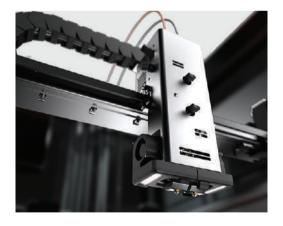
The BigRep STUDIO is optimal for premium large-scale 3D print projects and has been specifically designed for speed and precision. Delivering high-quality results around the clock, it is an ideal size for all working and production environments.



#### **Comfortable to Use**

The Ergonomic Design

Raised for maximum user comfort, the BigRep STUDIO stands at an ideal height for everyday use. Keeping everything compact and accessible, two filament spools can be held below the printer, alongside additional storage space.



### **Accelerated Printing with Precision**

The Print Head

The direct drive extruder with a 0.6mm nozzle enables printing using flexible materials, with maximum speed and precision. Its innovative print head was specially designed by BigRep to achieve a high level of detail for large-scale print projects, allowing for a layer height of as little as 0.1mm.



#### **Saves on Space**

The Slim Build

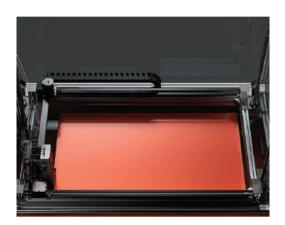
The BigRep STUDIO is a 3D printer that slots perfectly into all workspaces. Simpler to transport than other larger 3D printer models, its slender frame easily fits through standard doors in offices and studios, either as one piece or in two parts.



### **Easy and Intuitive**

### The Graphical User Interface

A new intuitive user interface on a touch panel PC enables many innovative features such as progress checks, including a webcam upgrade, and a resume print function after power failure. It includes an option to calibrate print levels while a job is in progress.



### **Fast-heating Print Bed**

The Print Bed

Prep time is significantly reduced for all print projects, with the STUDIO print bed reaching an optimal adhesion temperature of 60 °C in just 10 minutes. Distance from the print bed can be continually calibrated, allowing for maximum flexibility and control over print levels.



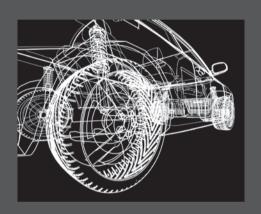
#### **Enclosed Environment**

The Glass Slide Walls

The STUDIO has side walls for increased safety, in addition to auto-pause of print jobs upon opening. The sleek glass doors slide back for easy access to the print bed and enable users to visually monitor the printing process.

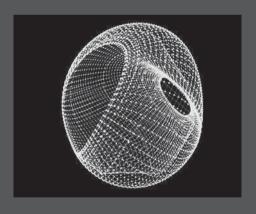
# **COST-EFFICIENT** TECHNOLOGY FOR A BROAD RANGE OF **APPLICATIONS**

The BigRep STUDIO quickly and accurately brings innovative ideas to life as 3D prints. It fits easily into any office, studio or factory space to print cost-efficient prototypes and final products, even those requiring the most intricate level of detail.



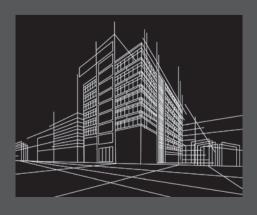
### ENGINEERING AND RAPID PROTOTYPING

Faster and more cost-efficient production of prototypes broadens development and design potential for industrial applications. The BigRep STUDIO allows for simple, quick and low-cost manufacturing of product iterations, meaning higher quality products and shorter development times.



### RESEARCH AND DEVELOPMENT

The BigRep STUDIO offers new learning, research and innovation possibilities to students, educators and scientists alike. It is a workhorse machine that goes the extra mile, as well as being safe, easy to use and ideal for gaining experience in the production of large-scale objects.



### ART, DESIGN AND ARCHITECTURE

The BigRep STUDIO empowers designers, artists and architects to bring previously inconceivable ideas to life. The compact machine can be set up virtually anywhere, meaning creative professionals can now produce objects in their own studios and workshops. Thanks to the STUDIO's cost efficient technology, experimenting with new designs can be fast and effortless.

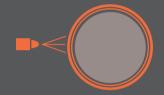


Fitting comfortably into most workspaces, the BigRep STUDIO has been expertly engineered to make in-house 3D printing easier than ever before. Its speed and precision means you can bring your large-scale prototypes and ideas to market quickly and efficiently. More control gives your business that competitive edge.

# REFINE BIG PRINTS WITH POST-PROCESSING

Sometimes a 3D print serves as a blank. Objects printed with FFF can be treated and refined in various ways, for example by improving or modifying their surfaces, or by using objects as positive or negative forms for molding and casting processes.







### SMOOTHING AND FINISHING

Grinding, sandblasting, shot blasting and vapor steaming are the most common methods of finishing FFF 3D-printed objects. This enables the creation of prototypes which adequately convey the final product's look and feel.

### COATING

Various coating methods help create true-to-form design prototypes out of 3D-printed objects. Coatings can also improve functional characteristics such as strength, temperature resistance and adhesiveness.

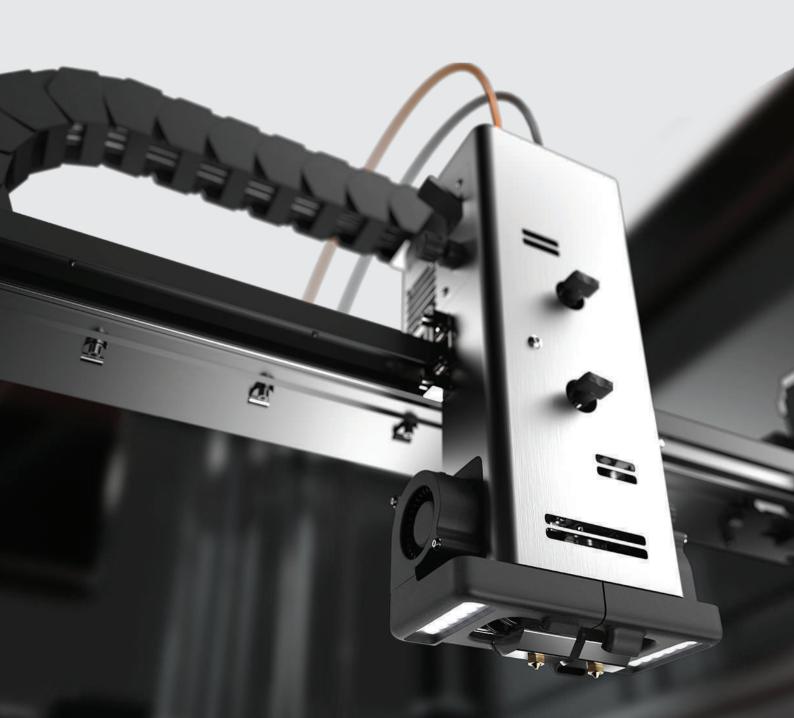
### MOLDING AND CASTING

3D printing, and especially large -scale 3D printing, is an ideal tool for manufacturing positives for molds and casts. Injection molding, silicone molding and composite molding are the most commonly used techniques

Fast, precise 3D prints are just a few clicks away with the BigRep STUDIO.

A 0.6 mm nozzle on the direct drive dual extruder enables printing of large-scale objects and ideas quickly, in ultra-fine detail.

The STUDIO works around the clock, to help your business deliver optimal results more quickly and efficiently.



### TECHNICAL SPECIFICATIONS

Fitting neatly into an ergonomically designed, easily transportable package, the BigRep STUDIO is a workhorse machine that punches above its weight to deliver top-grade results around the clock.

Build volume	x 500 y 1000 z 500 (mm)
Layer resolution	100 – 400 microns
Acceleration	Up to 600 mm/s <sup>2</sup>
Extruder	Advanced version: Dual extruder
	each equipped with 0.6 mm nozzle
Printing technology	FFF – Fused-Filament-Fabrication (FDM)
Certified materials	BigRep PLA, BigRep Pro HT, BigRep PETG, BigRep PRo HS
	other filaments on request.
Print bed temperature	Max. 75 °C
Printer weight	Approx. 350 kg
Size	x 1693 y 1056 z 1506 (mm)
Power	208 V - 240 V, 16 A, 50/60 Hz
Safety certifications	CE approved



### FII AMENT

BigRep filaments have been designed specifically for large-scale printing projects with the BigRep STUDIO and BigRep ONE.

Our FDA-aligned filaments are manufactured under carefully controlled conditions to ensure consistency and precision in the printing of objects.

BigRep's filaments are made according to open-source designs, meaning there is no vendor lock-in for customers.











BIG PRINTS.

From experiments to complete furniture, from individual parts to objects composed of multiple materials, from the initial idea to the final product – anything is possible.



### **SMART** SOLUTIONS FOR **BIG IDEAS**









