bigrep

RELIABLE SYSTEMS
FOR FLEXIBLE MANUFACTURING

REDEFINING **ADDITIVE**

BigRep develops the world's largest serial production 3D printers, creating the industry standard for large-format additive manufacturing. Our award-winning, German-engineered systems have established new standards in speed, reliability and efficiency for additive technology. We're the preferred choice of engineers, designers and manufacturers at leading companies in the industrial, automotive and aerospace sectors.

bigrep ONE

The BigRep ONE was created to make 3D printing large-format parts as fast and easy as possible. With a one cubic meter build volume, the ONE was the largest serial produced FFF additive manufacturing system when first introduced. It was lauded in the industry and set BigRep's standard as an industry innovator and manufacturer of reliable large-format 3D printers.

bigrep STUDIO G2

The BigRep STUDIO G2's engineering-grade material compatibility makes manufacturing quality large-format parts easy. Its enclosed print envelope maintains a controlled temperature and a print volume of 1000 mm x 500 mm x 500 mm, enabling continuous printing of large-format objects with polyamide and other abrasive, engineering-grade materials.

bigrep PRO

The PRO is a 1000 mm^3 large-format additive manufacturing system for industrial applications. Harnessing BigRep's all-new proprietary Metering Extruder Technology (MXT®) for speed and precision, the PRO is designed and manufactured for repeatable prints with engineering-grade materials.

bigrep NOWLAB

BigRep's innovation consultancy creates revolutionary concepts in-house, and works with leaders in global industries to make the most advanced innovations and technological solutions with additive manufacturing. Working in close partnership with cutting-edge organizations like Ford, Daimler, Bosch Rexroth and more, NOWLAB has realized a plethora of visions for additive technology.

german brand award '18 winner

GERMAN DESIGN AWARD GOLD 2016

GERMAN INNOVATION AWARD '18 WINNER

bigrep STUDIO G2

RELIABLE PRINTING IN **LARGE-FORMAT** FOR **ENGINEERING-GRADE** MATERIALS

The BigRep STUDIO G2's engineering-grade material compatibility makes manufacturing quality large-scale parts easy. Its enclosed print envelope maintains a controlled temperature and a print volume of 1000 mm x 500 mm x 500 mm, enabling continuous printing of large-format objects with polyamide and other abrasive, engineering-grade materials.

The STUDIO G2 and its compatibility with engineering-grade has made it a must-have for innovative facilities on the like **Autodesk**.

With their STUDIO G2, **Steelcase** produces full-size, functional prototypes quickly and easily.

Made for printing with abrasive, engineering-grade materials like PA6/66 at maximum speed and high resolutions.

bigrep **PRO**

AN **INDUSTRIAL** MACHINE FOR **PROFESSIONAL** PRODUCTION

The PRO is a 1000mm^3 large-format additive manufacturing system for industrial applications. Harnessing BigRep's all-new proprietary Metering Extruder Technology (MXT®) for speed and precision, the PRO is designed and manufactured for repeatable prints with engineering-grade materials.

Ford invested in the BigRep PRO for faster speeds to meet their growing demand for additively manufactured tooling, like jigs and fixtures, and for engineering-grade materials to create end-use parts.

Boyce Technologies bought a PRO for small-batch end-use part production – an application they've already applied using other BigRep systems.

The PRO's CNC Control System designed by **Bosch Rexroth** gives users more information and control with advanced data collection throughout the printing process.

METERING EXTRUDER
TECHNOLOGY

bigrep MXT®

THE NEW **FAST** AND **PRECISE EXTRUSION** TECHNOLOGY

BigRep's proprietary Metering Extruder Technology (MXT®) is a reinvented thermoplastic extruder with unmatched speed and precision.
This first-of-its-kind extruder separates filament melting and material deposition to improve speed, geometric accuracy, and repeatability.
It enables ultimate control on large-format prints with engineering-grade materials like Polyamide to achieve the highest quality in every application.

All-New Technology

By implementing a metering pump and reservoir for molten filament, Metering Extruder Technology reinvents the thermoplastic extrusion process by separating filament melting and material deposition to print with unmatched speed and control.

Unprecedented Accuracy

While most additive technology pushes solid filament through extruders by exerting force at a distance from the hot end, MXT's highly accurate metering pump is just above the hot end providing local force to allow precise flow control.

Up to 5x Faster

Due to the improved filament melting and material deposition processes, MXT achieves unmatched speeds while producing high-quality large-format parts with engineering-grade materials. With its high material throughput, MXT prints three to five times faster than traditional extrusion technologies depending on part geometry and layer height.

bigrep **FILAMENT**

ADVANCED **MATERIALS** FOR **INDUSTRIAL** APPLICATIONS

BigRep's high-performance filaments are meticulously engineered for a broad range of industrial applications across the automotive, aerospace, education, and other sectors. Now producing advanced engineering-grade materials including TPU, PA6/66, and PET-CF, BigRep delivers the most advanced 3D printing materials for a wide range of custom use cases.

PA6/66, a highly durable 3D printing filament for industrial applications especially within the automotive and aerospace industries. Light weight with high rigidity and high resistance to heat and chemicals.

PET-CF, an engineering-grade filament for high-strength applications. Unprecedented dimensional stability and low moisture absorption, makes it the perfect material for printing in industrial environments.

PRO HT, a bio-performance material for open-environment 3D printing with a significant increase in temperature resistance compared to the average PLA. Ideal for practical, end-use applications.

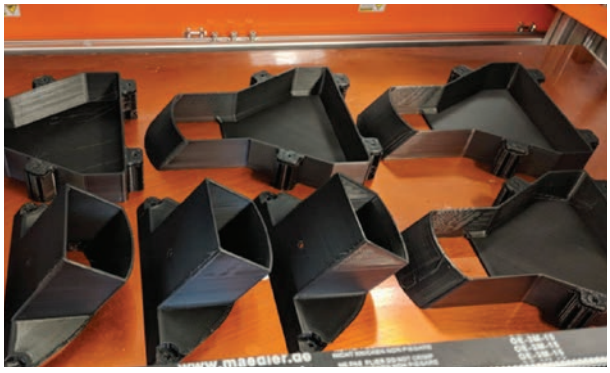
bigrep **APPLICATIONS**

AN ADDITIVE **SOLUTION** FOR **EVERY CHALLENGE**

BigRep's large-format 3D printers are proven systems for industrial manufacturing environments. These are just a few of the applications industry giants have found to deliver fast returns on their investment in BigRep's additive technologies.

Ford turned to BigRep's additive manufacturing systems to optimize lead times when creating tooling, the cost of outsourcing, and tool weight – later investing in a BigRep PRO to upscale their capabilities to end-use parts.

With their large-format systems, **Steelcase** produces full-size, functional prototypes quickly and easily. Prototype's that can bear a user's full weight are created in just four days, 175% faster than the 2-month lead for traditional methods.



Boyce Technologies found that lead times on previously outsourced parts could be nearly eliminated by manufacturing parts in-house overnight using "lights off" additive manufacturing processes.

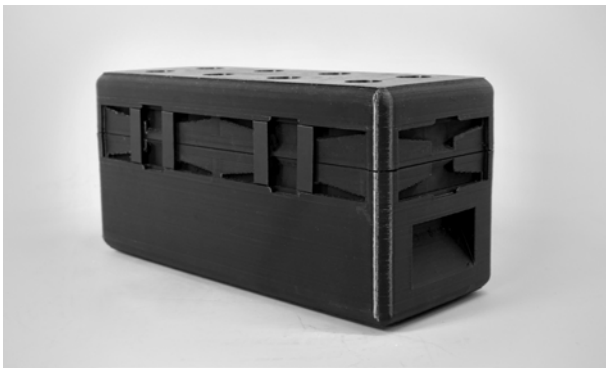
bigrep **NOWLAB**

The world's first 100% 3D printed electric motorcycle, designed and printed in just 12 weeks. Made of just 15 fully printed parts, the NERA is fully functional and a globally lauded design.

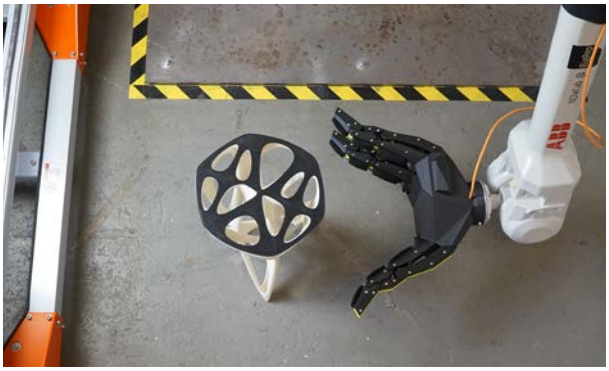
THE BIGREP **ADDITIVE INNOVATION** CONSULTANCY

BigRep's innovation consultancy creates revolutionary concepts in-house, and works with leaders in global industries to make the most advanced innovations and technological solutions with additive manufacturing. Working in close partnership with cutting-edge organizations like Ethiad Airways, Airbus, Ford and more, NOWLAB has realized a plethora of visions for additive technology.

The NEXT AGV (Automated Guided Vehicle) is an autonomous transport system created in partnership with **Bosch Rexroth** to create tools for flexible industrial applications and the factory of the future.



Airbus turned to NOWLAB to modernize the investment shipping container industry. They've submitted a patent application for an additive production process using BigRep large-format 3D printers.

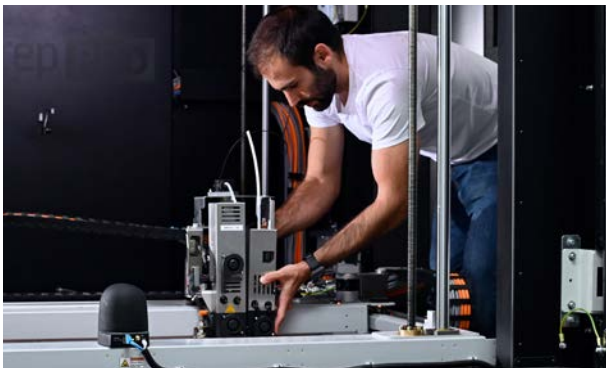


The Adaptive Robotic Gripper demonstrates the power and flexibility of BigRep's technology to create custom solutions for the factory of the future. Fully 3D printed and customizable for specific needs.

bigrep SERVICE

UNMATCED SERVICE AND **360° SUPPORT**

Our expert team of service technicians are standing by to help you get the most out of your BigRep additive systems. From training and on-site installations to extended service packages, we'll support your team every step of the way.



BigRep ensures the quality of every additive system with rigorous testing, but we know unexpected issues can happen. It's important to us that users have an opportunity to correct unforeseen problems quickly, so we stand by our products by offering a one-year warranty globally.

With a broad network of technicians and partners located across every continent, BigRep ensures support is always close by and as dependable as our hard-working additive systems.

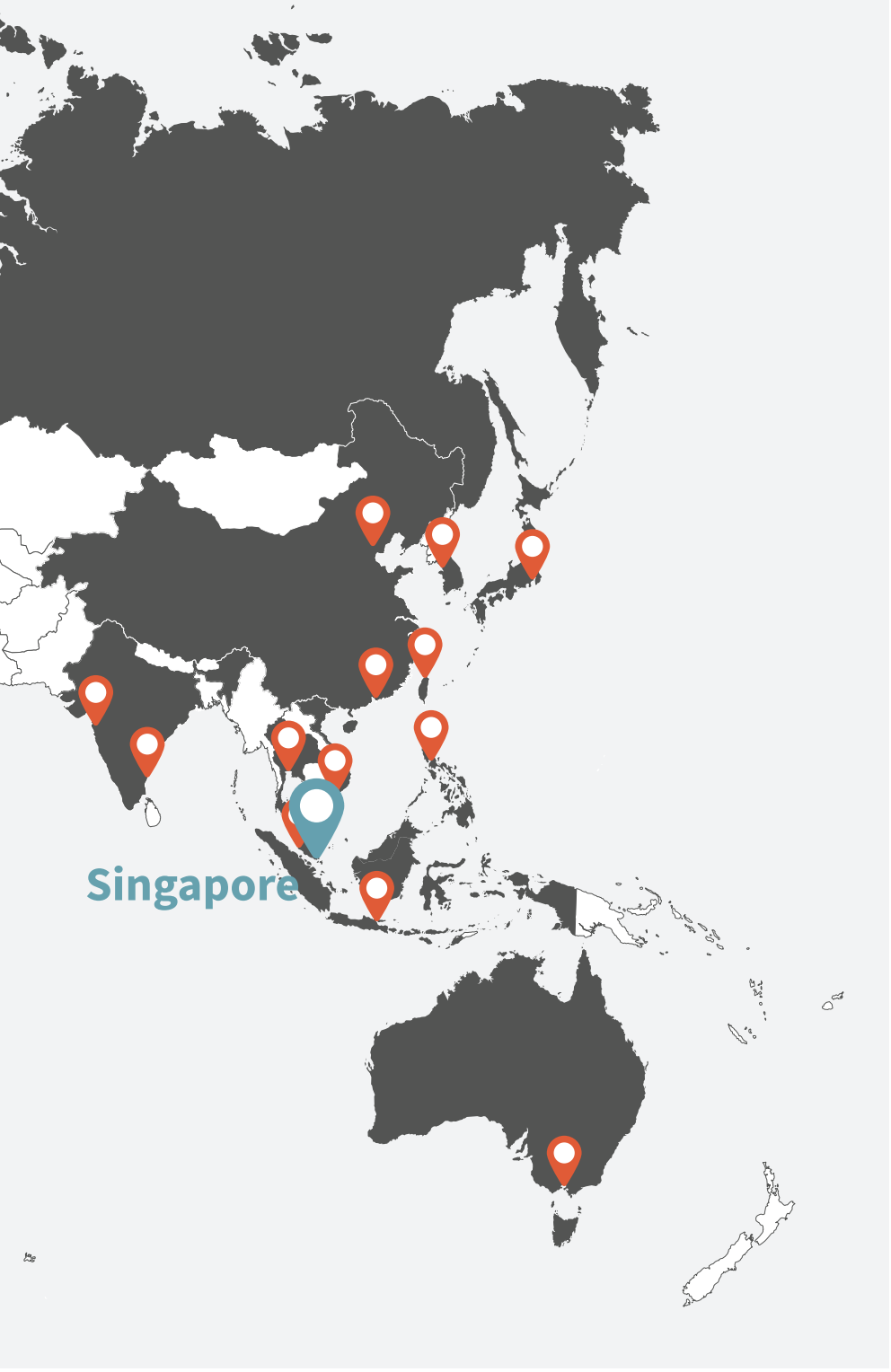
It's important to us that operators understand unforeseen problems before investing in servicing. That's why BigRep's first-level service, over the phone or email, is always free of charge.

Selected Customers, Investors & Partners

Fraunhofer · TNO · BASF The Chemical Company · DMRC · dap · RWTH AACHEN UNIVERSITY · MIT Massachusetts Institute of Technology

Innofil3D · rexroth A Bosch Company · DASSAULT SYSTEMES · AUTODESK. · SAP · KETER · ADEN ALL POWER. NO LIMITS.

SONY · CANYON · Villeroy & Boch 1748 · west elm · Steelcase



BIGREP'S **GLOBAL NETWORK**

Operating around the world, BigRep provides top-quality technical and training services to help customers get the most from their BigRep large-format 3D printing technology. From its headquarters in Berlin, Germany, to its offices in the USA and Singapore, BigRep's fast-growing, international team of experts is consistently innovating and finessing their now world-renowned industrial printers.

BigRep's mission is to provide the highest quality large-format 3D printing solutions at an affordable price point, empowering companies across industries and around the globe to innovate. With major global investors such as Klöckner & Co, BASF and Körber Group on board with its vision, BigRep is led by industry experts setting global standards for quality in machinery, software, materials and service.

DAIMLER · VOLVO · Ford · JAGUAR · LAND ROVER · TOYOTA · VOGELSANG

thyssenkrupp · SLG KUNSTSTOFF · SIEMENS · winergy · Danfoss · ABB · BOYCE TECHNOLOGIES

AIRBUS · PREMIUM AEROTEC · ETIHAD AIRWAYS · tpc · the DESIGN MUSEUM

bigrep

REDEFINING **ADDITIVE**

bigrep.com

EUROPE
Gneisenaustraße 66
10961 Berlin
Germany
Phone +49 30 20 84 82 60

NORTH AMERICA
50-E Concord Street
Suite 100 Wilmington, MA 01887
United States
Phone +1 781 281 0569

APAC
120 Lower Delta Road
#04-04/05 Cendex Centre
Singapore 169208
Phone +65 6909 8191