



BigRep Unveils Two High-Temp 3D Printers - the ALTRA 280 & IPSO 105. Fully Automated & Precise Machines for Industrial Applications.

BigRep is launching two large-volume high-temperature 3D printers, the ALTRA 280 and the IPSO 105, engineered to be fast, reliable, precise, and highly automated delivering industrial strength parts in full scale.

Berlin, Germany, May 28, 2024 - BigRep, considered to be one of the global leaders in large-scale Fused Filament Fabrication (FFF) 3D printing, announced the launch of two high-temperature 3D printers - the ALTRA 280 and the IPSO 105. These two 3D printers are well known in the European region formerly as PRECISE and MEX and originate from the previously announced planned acquisition of HAGE3D GmbH. The updated machines are engineered to meet the needs of the most demanding industrial applications from aerospace to defense to automotive, and to offer speed, reliability, precision, and automation. These machines have been rolled out in Europe, the Middle East, and Africa, and are available for purchase starting now.

The ALTRA 280 and IPSO 105 update the company's portfolio to include high-temperature FFF 3D printing and expand into new applications, that can print the full range of standard to high-performance polymers. They have an open material system for a broad filament choice, either with BigRep's quality filaments or 3rd party compatible materials.

The highlights of the [BigRep ALTRA 280](#) are the large, heated 280-liter build chamber (500mm x 700mm x 800mm), that reaches temperatures up to 180°C, state-of-the-art DSX extruders reaching up to 450°C, and the fully automated quick start. With up to 4 DSX extruders, the ALTRA 280 is designed to achieve reliable dual extrusion, additionally safeguarded by their respective backup extruders. Designed for productivity, the machine enables flawless prints and functional parts.

While smaller in size, the [BigRep IPSO 105](#), is a large-scale industrial 3D printer with impressive temperature capabilities. It is an industry all-rounder at an attractive price-to-performance ratio in the

high-temperature machine category. Designed for tooling applications requiring high-performance materials, the IPSO 105 is engineered to be a tool maker's tool, with a heated build chamber of 105 liters (400mm x 600mm x 440mm) reaching up to 100°C, and a print bed heated up to 180°C. It features dual DSX extruders, capable of printing high-performance materials up to 450°C. The 3D printer shares some of the key features with its big sister, the ALTRA 280, such as the fully automated quick start.

Dr.-Ing. Sven Thate, Managing Director of BigRep GmbH commented, "We are proud to extend our portfolio towards high-performance filament extrusion with our open system approach, thereby aiming to double the addressable market of our solutions with the technology from HAGE3D, our recently announced planned acquisition. For our European customers, both the ALTRA 280 and IPSO 105 are considered game-changing industrial AM solutions at different scales that come with all temperature capabilities, unlocking wide material options. Backed by our 3D printing ecosystem of an intuitive software suite, global customer service, and an eLearning platform, we have customer's success in focus as we expand our offering to high-performance applications."

Key features of the ALTRA 280 include:

- **Large-Scale 3D Printing:** A generous build volume of 500 mm x 700 mm x 800mm (volume of 280 liters) designed to produce intricate fully-fledged prototypes, production, and end-use parts.
- **High-Temperature Capabilities:** Prints with high-performance materials such as ULTEM 9085 and PEEK (AM200) up to 450°C, enabling the production of strong, lightweight parts even for challenging industrial applications.
- **Uninterrupted Productivity:** Equipped with up to four DSX extruders, the ALTRA 280 delivers seamless production with dual extruders and two respective backup extruders, enabling reliable performance around the clock.
- **Fully Automated Quick Start:** The ALTRA 280 is designed for easy operation, with fully automated calibration and pre-heating processes, allowing users to start printing at the push of a button.

Key Features of the IPSO 105 include:

- **A Toolmaker's Build Volume:** A build chamber of 400 mm x 600 mm x 440 mm (105 liters), allowing a wide range of applications, from tooling to end-use parts.
- **High-Temperature Capabilities:** With build chamber temperatures of 100°C and print bed temperatures up to 180°C, IPSO 105 prints with a variety of engineering-grade and high-performance materials such as PEKK and PEKK-CF.
- **Dual Extrusion:** The dual DSX extrusion system is designed to ensure uninterrupted printing with multi-material or multi-color parts, expanding design possibilities and functionality.
- **Automated Seamless Production:** The quick start feature, out-of-filament sensors, and automatic switching to a backup extruder in case of an irregularity maximize productivity and reliability.

Thomas Janics, Managing Director HAGE3D GmbH said, "We believe that both machines will transform the way manufacturers approach additive manufacturing, especially in the aerospace, military, and automotive segments, where high-performance parts are crucial. They are a combination of reliability, precision, large volume, and high-temperature capabilities and are engineered to push the boundaries of what's possible with AM."

About BigRep

With more than 1,000 large-scale 3D printers already in operation across various industrial sectors, [BigRep](#) has earned its reputation with its expertise in large-scale FFF. The German-manufactured 3D printers empower engineers, designers, and manufacturers, spanning from startups to Fortune 100 corporations. Its vision is to expedite the transition from prototyping to production, ensuring products get to market quickly.

Media Kit

[Link to OneDrive](#)

Press Release

[Media Library Press Release – bigrep.com](#)

Contact BigRep

Nika Music

Digital Marketing & PR Manager

Phone: +49 30 2084 8260

Email: nika.music@bigrep.com

Dr. Sven Thate

Managing Director BigRep GmbH

Mobile: +49 15 1143 23541

Email: sven.thate@bigrep.com

Thomas Janics-Jakomini

Managing Director HAGE3D GmbH

Phone: +43 35 7836412 400

Email: thomas.janics@bigrep.com

Follow BigRep

[LinkedIn](#)

[Instagram](#)

[X \(formerly known as Twitter\)](#)

[YouTube](#)

Forward-looking statements

This release may contain forward looking statements, estimates, opinions and projections with respect to anticipated future performance of BigRep GmbH and its subsidiaries („BigRep“). These forward-looking statements can be identified by the use of forward-looking terminology, including the terms “believes,” “estimates,” “anticipates,” “expects,” “intends,” “may,” “will” or “should” or, in each case, their negative, or other variations or comparable terminology. These forward-looking statements include all matters that are not historical facts. Forward-looking statements are based on the current views, expectations and assumptions of the management of BigRep and involve significant known and unknown risks and uncertainties that could cause actual results, performance or events to differ materially from those expressed or implied in such statements. Forward-looking statements should not be read as guarantees of future performance or results and will not necessarily be accurate indications of whether or not such results will be achieved. Any forward-looking statements included herein only speak as at the date of this release. BigRep undertakes no obligation, and does not expect to publicly update, or publicly revise, any of the information, forward-looking statements or the conclusions contained herein or to reflect new events or circumstances or to correct any inaccuracies which may become apparent subsequent to the date hereof, whether as a result of new information, future events or otherwise. BigRep accepts no liability whatsoever in respect of the achievement of such forward-looking statements and assumptions.