

Press release

## Q.Big 3D: Funding round with HZG Group for market launch of large-format 3D printer



After signing the contract in Lichtenfels (L-R): Dr. Florian Bechmann (CTO of HZG Group), Siegfried Knüpfer (Shareholder and Senior Advisor of Q.Big 3D), Alexander Bürhaus (CIO of HZG Group), Katja Herrmann (CEO and Co-Founder of Q.Big 3D), Dennis Herrmann (CTO and Co-Founder of Q.Big 3D), Susanne Samwer (Director Finance of HZG Group), Holger Wanko (Director Finance / Controlling at Manz AG), Kerstin and Frank Carsten Herzog (Founders and Managing Directors of HZG Group) Copyright: Fotostudio BeWe - Stefanie Brehm

Aalen / Lichtenfels, 06 July 2023. Aalen-based Q.Big 3D, a specialist in printing large components using innovative additive manufacturing processes, has successfully closed its Series A funding round. The €2 million round was led by 3D printing specialist HZG Group. Manz AG, a global high-tech engineering company with an extensive technology portfolio, has been invested in the startup since its early stages and stays on board. So does Manz-founder Dieter Manz who is personally invested.

The fresh capital comes in time for Q.Big 3D's launch of the Queen 1 large-format printer. It uses the university spin-off's patented technology characterized by seamlessly operating two nozzles in the printing process. One nozzle is used for fast, high-volume printing and one for applying fine surfaces and structures. The system works with plastic granulate as widely available and well-established base material.

During the ramp-up phase of the Queen 1 printer that started in autumn 2022, beta customers have produced large-scale components such as rear light mounts, sophisticated pipe flanges in the field of energy technology, and side doors for helicopter cockpits. Q.BIG 3D is currently intensifying its sales activities for the serial product, which will be ready for shipment by the end of this year.

Kerstin Herzog, founder and managing director of HZG Group, said: "In the field of additively manufactured large components, Q.Big 3D's technology covers a very broad spectrum from prototypes, design and functional samples to spare parts, operating equipment and end products. We are thrilled by the potential range of applications because this is exactly where the classic

advantages of 3D printing are effectively merged with a short and tool-less process chain to manufacture large components. We are excited about the next steps we will take together with the team and its Queen 1."

Katja Herrmann, co-founder of Q.Big 3D, said: "Compared to alternative processes such as milling, laminating or casting, we enable a significantly shorter lead-time for the production of components at a lower price. For example, one customer confirms a lead-time reduction of 70 percent and a cost reduction of at least 30 percent. With this customer feedback and HZG Group as an investor at our side, we are very confident about the market launch. Following the R&D phase, we are now set for growth".

### **XXXL becomes economical: Print bigger**

Setting the nozzle up and putting it down is often the critical part in the additive manufacturing process, as it is difficult to control the component's accuracy in the process. So far, users therefore had to choose between large components with coarse surface structures and small components with filigree structures. Q.Big 3D's innovation is the VFGF (Variable Fused Granular Fabrication) process, which allows the amount of extruded plastic to be precisely controlled according to the part's geometry.

With an installation space of 1700 mm x 1100 mm x 1050 mm and the use of plastic pellets, large-format 3D printing with the Queen 1 printer is an economical solution for many applications. Q.Big 3D customers include companies such as Voith, Kärcher and John Deere. Great potential for future use lies in the rail and commercial vehicle industry, in shipbuilding, aerospace, mechanical engineering, architecture, and construction, as well as in the exhibition stand construction and building technology business.

Pictures



Complex & voluminous: light carrier for motorhome rear. Copyright: Q.Big 3D



Print bigger: Q.Big 3D's Queen 1 printer will begin shipping in production stage in late 2023. Copyright: Q.Big 3D

## About Q.BIG 3D GmbH

Q.BIG 3D has established itself as a specialist for large 3D printed components, the engineering of new component applications and their printing-as-a-service offer. Special features of the VFGF process developed by Q.BIG 3D and also used in the industrial printer QUEEN 1 are the algorithm-based variability of the 3D printing nozzle for efficient material use and the use of cost-effective raw materials.

Q.BIG 3D was founded at Aalen University in 2019 and has received numerous awards for its technology, most recently the Innovation Award of the Ostwürttemberg economic region in November 2021. The company is on a growth path and is currently looking for 3D specialists.

Further information: [www.qbig3d.de/en](http://www.qbig3d.de/en)

## About HZG Group

HZG Group is composed of the business units venture capital investment, business angel investment, and research, development, and application, all focusing mainly on 3D printing. In its venture capital activities, HZG Group focuses on investments in the DACH region, starting from series A stage. In its business angel activities, the group gets involved in seed phase ventures via HZG NewConcepts. In addition, the company is currently building NADDCON, a research, development, and application center in Lichtenfels. The NADDCON will give portfolio companies access to this facility at the highest international level.

Kerstin and Frank Carsten Herzog are founders and managing partners of HZG Group. With founding Concept Laser in 2000 based on their own research work, the company's development into a technology and innovation leader in the field of metal 3D printing, and the successful integration into global corporation General Electric, they can draw back on more than 25 years of experience in 3D printing. Accordingly, they complement their financial investments through HZG Group with their know-how, understanding of the industry, network, and passion for technology. In addition to their entrepreneurial activities, Kerstin and Frank Carsten Herzog are regionally involved as promoters in the field of education and in bringing science and business together. Further information: [www.hzg-group.com/en](http://www.hzg-group.com/en)

## About Manz AG

Manz AG is a globally active high-tech engineering company.

With a focus on the automotive industry and electromobility, battery production, electronics, energy, and medical technology, Manz develops and builds innovative and efficient production solutions: From customized single machines for laboratory production or pilot and small series production, to standardized modules and systems, to turnkey lines for mass production.

Technologically, Manz's production systems are based on many years of experience in automation, laser processing, inspection systems, wet chemistry, and digital printing.

With currently around 1,500 employees, the Manz Group develops and produces in Germany, Slovakia, Hungary, Italy, China and Taiwan. Sales and service subsidiaries also exist in the USA and India.

Manz AG was founded in 1987 and has been listed on the Frankfurt Stock Exchange since 2006. In fiscal year 2022, the Group generated revenues of around EUR 251 million.

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