

Clenaware Systems



Clenaware Systems is dedicated to glass washing, drying and dishwashing. As such, the small Northamptonshire-based manufacturer has built its business on playing an essential role in creating the perfect pint.

"We are passionate about glass washing. When it comes to beer and beverages, the glass is the key element." Clenaware CEO Richard Harris explained. "How a glass is washed, cleaned and dried makes a huge difference to the taste and the presentation of the drink it holds."

Endorsed and used by major breweries, Clenaware has become a recognised market leader in glass washing equipment, supplying restaurants, pubs and clubs.

In addition, Clenaware manufactures Gogglewash Machines and accessories, designed to clean 3D glasses thoroughly and efficiently after each wear. The purpose built machines are primarily used by major 3D cinemas, screening rooms, theme parks, educational establishments and other public attractions around the world.

Outside the hospitality sector, Clenaware applies its expertise to produce thermal disinfection washers used by the NHS and healthcare industry.

THE CHALLENGE

Clenaware designs, manufactures, tests and sells all of their machines and parts - providing end-to-end support for their customers. This hands-on approach has earned the company the reputation for excellent quality and customer service, but as a small business with global reach, the start-to-finish involvement means that Harris and his team are always on the lookout for ways to save time without compromising on the quality of their products.

"Clenaware's machines are made up of roughly 600 parts, 75% of which are designed by us, and the remaining 25% being off-the-shelf," explained Harris. "It can take weeks if not months just to design a specific part, making for long product lead times."

"Procuring off-the-shelf parts has its own lifecycle, as well - sourcing suppliers, coordinating invoicing and waiting for deliveries."

"We were looking for ways to make our supply chain more efficient; to make things easier and develop products faster," he continued. "By designing and creating parts ourselves, we could eliminate supplier delays and free up mountains of time."

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THE SOLUTION

Having dabbled in 3D printing previously, Harris saw the technology as an opportunity to invest in the business and purchased two Markforged Mark Two Desktop printers.

“I liked the simplicity of Markforged,” said Harris. “It is one easy-to-use seamless process from design to print. You tell the printer what to do and it gets on with it. It just works.”

Clenaware started using the Markforged printers for R&D, printing prototypes and proof of concepts, but soon started redesigning production parts for printing.

“We went hell for leather when it came to 3D printing,” said Harris. “If a part could be 3D printed, we’d do it – pursuing the idea that the more you could print, the more you could remove the hassle of the supply chain delays and entanglements.”

Since its original investment four years ago, Clenaware has invested in a further 13 Markforged printers: eight of them Mark Two desktops and five industrial Markforged X3s, restructuring their business to print parts for their machines.

“3D printing allows us to manage production for efficiency giving us the flexibility to print parts as and when we need them,”
continued Harris.



CONCLUSION

Over the past four years since investing in the technology, the Clenaware team has refined their use of 3D printers, realising that just because they could print every part, it didn't mean they should.


"We've learnt a lot along the way, gaining an understanding of where 3D printing can make the most impact for our business - and where working with suppliers is a better fit," Harris advised.

By designing and printing the parts needed to manufacture its machines, Clenaware has significantly reduced their tooling costs, and instead of facing supply chain shortages and delays, they now use Markforged to print small batch parts on demand.

Clenaware has cut the production times around 10% to 15% on Airack™ Glass Dryers by printing 75% of its parts using Markforged technology. Designed to dry glassware quickly and effectively, Airack is one of Clenaware's most successful products.

"We ship hundreds of Airack Glass Dryers around the world each month," said Harris. "And thanks to Markforged we can design and produce them using the 'Just in Time' model, printing the parts as we need them, fulfilling orders more quickly - saving valuable time, as well as storage space in our factory."





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The Future

Clenaware remains committed to the value of 3D printing and continues to investigate new opportunities of how and where it can help to save time in their manufacturing processes.

Together with Markforged, Clenaware is exploring the idea of printing parts at the point of need, evaluating how one of its global distributors in Ireland, for example, could simply print a part they needed for an Airack on the premises, rather than having to order and ship it in from the UK operations.

"3D printing plays an important role of where we go in the future," concluded Harris. "It is all about finding the right solution for the right part."



Clenaware Systems has been designing and manufacturing ware washing equipment for over 50 years. They are proud that their Glass Washers, Dishwashers and accessories are designed and hand-built to the highest quality in their UK-based factory in Northamptonshire.

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