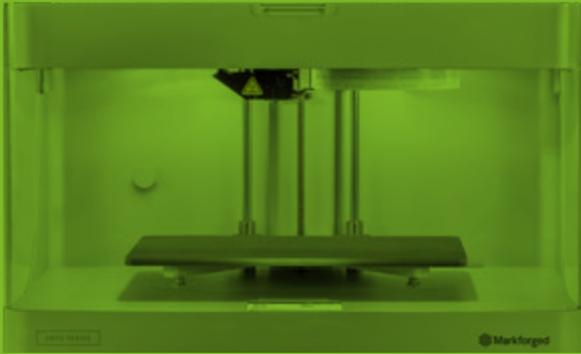


5 Questions with: Jim Gollings, Senior Design Engineer at Henry Squire & Sons Limited

Technology used: Markforged Composite Series Printer



Henry Squire & Sons Ltd., based in Wolverhampton, UK have been innovators in the manufacture of high quality locks for the last two and a half centuries, and are responsible for the iconic padlock design that everyone will be familiar with.

Learn how the Markforged Mark 2 is helping Henry Squire & Sons to take innovation to the next level.



At Henry Squire & Sons, you have been innovating in the manufacture of high quality locks for over 230 years. How has the addition of a Markforged Composite 3D printer to your process helped you to continue this innovation?

The Markforged 3D printer has allowed us to assess far more quickly whether a design will work, both mechanically and aesthetically. We are now able to produce working models of locks to check for design flaws and for management approval before committing to steel prototypes for strength testing etc.

We have also been able to solve customer solutions using printed components where a small number were required, whereas, in the past, minimum order quantities would be an issue.

In addition, we are now exploring the possibilities of producing tooling for CNC manufacturing which would have previously been made from metal.

Have you explored other 3D printing technologies, and if so, how did they compare to the Markforged?

Yes, the Markforged 3D printer is our second printer and is a considerable improvement on our previous machine which was not a Markforged machine.

The quality difference is marked as we are now able to produce parts without compensating for inaccuracy in the printing process.

How straight forward have you found the Markforged technology to be in order to make use of?

We were given a short training session when the printer was installed and we have not had to seek any further advice thus far, the web based software and printer interface are easy to use.

After owning a Markforged 3D printer for 4 months, what was it about the technology that led you to make use of the printer in your tool room?

The idea of making simple, limited use tooling was explored with the previous printer and proved to be a success, with the greater level of strength and accuracy of the Markforged printed parts we have chosen to push further with far more substantial tooling solutions, the tooling will be tried out in the next couple of months. The cost saving on tooling will be significant.

HK3D and Henry Squire & Sons have been working together for just over 4 months now, what would you tell others about the service that you have received?

We have had great service from HK3D, the team are friendly and eager to help out

