

ENCSITE Case Study – AddQual Ltd

The Company

AddQual Ltd is an early-stage manufacturing services company based in The iHub at Infinity Park, Derby.

What they do

The company provides a range of supportive and consultancy services for aerospace product manufacturers and is also undertaking R&D activities to develop a process for the verification and qualification of component quality.

The Challenge

The company has identified a lack of robust standards and procedures associated with additive manufacturing of components for aerospace. These components must be compliant with very stringent quality control and audit procedures. In response to this need they are developing an innovative end-to-end service that will verify and qualify components produced using additive manufacturing and other rapid forming methods. The service will consider both material and dimensional quality and aims to be faster and more comprehensive than today's offerings.

As well as enabling customers to deliver components with the relevant quality assurance required for aerospace, the service will also meet medical, energy, automotive and rail requirements.

The company knows that setting up the full end-to-end service will require time and significant investment. To achieve this transition AddQual Ltd has developed a staged investment plan where early investments will enable them to introduce services that generate revenue whilst the R&D work required for the full offering is on-going. To accelerate progress against the plan AddQual needed to obtain additional funding to spread the investment further and to tap into local expertise to support the R&D work.

The Solution

Support from Encsite & the University of Derby was provided to observe and understand the process involved in making specific geometries/components and to assess the resulting risks and product quality. During the project additive manufacturing was used to create a range of demonstrator components to generate risks, opportunities and data.

“These demonstrators enabled us to prove our process and the testing data confirmed our product offer and the added value created.” Ben Anderson, Managing Director, AddQual Ltd.

Grant funding was secured to purchase software needed to support the development of the base qualification service offering. The funding would also be used to support the purchase of a 3D printer to aid the development and method for acquiring the data.

“Support was also provided to develop a more robust marketing plan.”



The Outcome

The work completed by Encsite through the University of Derby has resulted in a greater understanding of where opportunities for services may be found and the value that any potential improvement will have on potential customers. Many risks previously unknown to AddQual have been identified along with potential solutions including machine, material, staff and testing costs.

“Through the University of Derby we were signposted to further funding to continue our growth. We have accessed funding and support from the Encsite project, the Derby Enterprise Growth Fund and from the East Midlands Chamber. The grant funding provided by the programme and the network of funding contacts enabled us as a company to invest, develop and demonstrate the measurement process concept faster than planned.”

“The Encsite project has provided a great deal of support for AddQual enabling us to develop at a faster rate than would have been achievable without their support. With them we have accessed state of the art facilities, moved from concept to product demonstrators, established the value of the product to potential customers, accessed a network of funding sources and we are now working with an intern student who is helping establish our quality systems to help us achieve Aerospace standards. AddQual is currently on plan to start offering the service to external projects, starting with products from the Aerospace and Medical sectors.”