AME-3D enhances its additive manufacturing services, benefiting from RSPro 800 and Pilot 450

Case Study



In 2021, AME-3D, UnionTech's latest UK customer, added 2 brand new SLA 3D printers to their fleet, aiming to meet the increasing demand for additive manufacturing services in the local market. This equipment rapidly increased and diversified the company's service capability.



AME Group was founded in 1996 to offer 3D printing services to manufacturers based in Sheffield, UK. Since then, the company has expanded to offer low volume 3D printing services to manufacturers, engineers, industrial product designers and blue-chip companies across the UK. Originally the company started with wax-based additive manufacturing machines used to create tools for casting, then it gradually added other 3D printing equipment and is now offering SLA, SLS, vacuum casting and RIM casting capabilities.

In 2021, a £ 750,000 investment from NPIF-Mercia Equity Finance empowered AME to embark on a new period of growth, enabling it to hire new staff, acquire new equipment, and launch two new brands, the first of which is AME-3D. The new brand has performed strongly since its inception and established itself as one of the leaders in its field.

AME-3D currently has two UnionTech machines, RSPro 800 and Pilot 450, both are SLA printers, with which their SLA build volume has increased by eight times. Both machines have a solid granite recoater frame giving them unrivalled thermal stability.



This SLA machine is a first in the UK and uses Somos EvoLVe 128, the durable stereolithography material that produces robust, accurate, and high-detailed parts.

RSPro 800 is among the largest SLA 3D printers in the UK and is capable of building components with 800 x 800 x 550mm dimensions and a layer thickness from 0.07-0.25mm. AME-3D finds it perfect for large size and high precision demands of different applications, such as large automotive rapid prototypes, form, fit and function prototypes, wind tunnel testing models, medical and healthcare devices, film and TV props and many more.



With smaller dimensions, the Pilot 450 is capable of building between a layer thickness of 0.05-0.25mm and components up to 450 x 450 x 400mm in size. It is capable of fine detail builds and is well-suited to meet precise demands of different applications such as medical grade components, super high-definition scale models, accurate vacuum and RIM casting masters, form, fit and function prototypes, wind tunnel testing models and many others.



The materials running on this machine are Somos® Waterclear Ultra and Accura Xtreme Grey.

Rich Proctor, Managing Director from AME 3D, remarks "These UnionTech machines are brand new to us, and they are really exciting. The 450 is bigger than our previous machines. There is a 450 mm square bed and it builds 400 high. The 800 will build on an 800 mm square bed and 550 mm high, taking us vastly beyond where we were previously and enables us to build very large, single piece components." tions such as medical grade components, super high-definition scale models, accurate vacuum and RIM casting masters, form, fit and function prototypes, wind tunnel testing models and many others.



"A great example of what we can build in our UnionTech 800 is currently on the bed. It is an engineering prototype for a customer that is going to diecast the part, but they want to get this engineering prototype to make sure that the part does everything that it needs to before they go to production."

Being the newest member of the AME-3D management team, Rich is confident about the future. "AME-3D has got an amazing team. We' ve got over a hundred years of experience under our belts, and we have lots of experience of taking customers from concepts through to final products, and we can help any company move their product from start to finish."

With the ambition to improve value-adding, high-quality and high-accuracy digital industrial 3D Printing solutions at AME 3D in the UK, the discussions with UnionTech's Sales partner Europac 3D in the UK started early in the year 2021. First of all there was to specify the target specification: Accuracy! Reliability! Quality!

Marco Bruchhausen, Senior Sales Manager for Uniontech' s overseas base in Germany, accepted the challenge, sat together with John Beckett founder of Europac 3D, bundeled the experience of all involved and created the now at AME 3D established systems.

About AME:

The AME-3D product development team have a wealth and depth of experience, which has enabled the company to work with a variety of well-known brands like Hornby, Vax and Jaguar Landrover. And they've also supported specialist companies like marine device manufacturer, Blueprint Subsea, and nurse call system producer, Arquella, to name just a few.

About UnionTech:

UnionTech™ —With nearly 20 years of proven leadership in globally sourced stereolithography 3D printing systems, the UnionTech™ brand brings a fresh dimension of SL equipment supply to international markets. UnionTech′ s leadership as an Additive Manufacturing (AM) equipment and solutions supplier is also strengthened by actively focusing on the evolution of new photopolymer AM technologies as well as enhancements of SL technology. Nearly 50% of our large and growing professional team is dedicated to research and product development.



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