

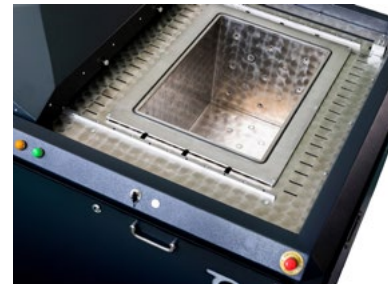
Processing the Future of Additive Manufacturing

Additive Manufacturing Technologies (AMT) brings world's first UL certified automated post processing solution for additive manufacturing to market



Overview

The additive manufacturing (AM) market is comprised of several often-disconnected steps: development, materials, printing and post processing. Much of the focus has been on materials and printing as prototyping has been the primary driver for AM, but as adoption moves toward high-volume production, post processing – which includes processes such as surface finishing, depowdering, coloring and metrology – becomes increasingly important. In fact, without reliable post processing solutions that are repeatable at scale, it will be impossible for AM to compliment or even replace more traditional manufacturing methods.



The Challenge

Additive Manufacturing Technologies (AMT) wanted to offer a solution to the growing gap in post processing by developing, manufacturing and selling better technology. This effort would help manufacturers move beyond prototyping and into full production of 3D printed components. As both aesthetics and surface finish can affect the desirability and functionality of a 3D printed part, the manufacturing industry needed a way to effectively finish goods. To address this challenge, AMT needed to produce an advanced product and demonstrate its capability to one of the largest 3D printing markets in the world: the United States (U.S.).



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The Solution

The PostPro3D from AMT enables manufacturers to finish 3D printed parts in a repeatable way that makes them as good as injection molded components. By doing so, AMT hopes the PostPro3D will completely transform post processing; whereas earning the UL Mark allows the company to access key markets with confidence.

In fact, UL Certification was a central goal from the very beginning.

“It was about developing a piece of machine technology that addressed the challenges in 3D printing,” says Joseph Crabtree, Chief Executive Officer of AMT. “Then, adding to that, designing it in such a way that it achieved UL Certification.”

By adding the UL Mark to the PostPro3D, AMT demonstrates that they have met UL’s requirements. In addition to allowing the company to access the U.S. 3D printing market, Crabtree notes that this achievement also demonstrates AMT’s commitment to relying on respected third-party standards to offer an added level of comfort to their clients.

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In addition to meeting UL’s requirements and client needs in the U.S., AMT designed the PostPro3D with an eye on global markets due to 3D printing growth in Asia, Europe and elsewhere.

“We’ve designed the machine in such a way that it will be compliant for the European machinery directive, CE (Conformité Européenne) and other requirements,” says Crabtree, before going on to mention that AMT also earned the C-UL Mark for Canada.

Of course, meeting requirements is only part of the challenge. Getting to market quickly is also critical to defining success; and UL helped ensure everything moved along as quickly as possible. Or, as Crabtree puts it, “the whole process from start to finish has been pretty slick...very professional on both sides of the Atlantic.” Overall, that sounds like a success at every stage of the process.

We would be pleased to discuss your needs and develop a plan to achieve your equipment or material objectives.

To schedule an appointment with one of our Industrial Equipment Engineers, email us at additivemanufacturing@UL.com or visit UL.com/am.



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