

One Million 3D Printed Hangers Exceed Customer Expectations

Optimized design provides a multifunctional part while reducing costs & additional SKUs

OVERVIEW

Merit3D, a leading additive manufacturing company, is producing one million hangers for Adhesives Technology using BASF Forward AM's [Ultracur3D® EPD 1006](#) and Photocentric's LC Magna printer. The hangers are required for every project they undertake. When production was halted due to the unavailability of the injection mold tool, a collaborative solution helped Adhesives Technology eliminate the need for a costly new injection mold tool and bring manufacturing back to the USA.

QUICK FACTS

Materials:

- Ultracur3D® EPD 1006

Technology:

- LCD

Partner:

Photo**centric**

Merit3D

Merit 3D is an Additive Manufacturing solutions provider based in Price, Utah. They have developed optimized solutions to make products faster, better, and more efficient than traditionally possible. As these technologies become mainstream in the manufacturing process, Merit 3D remains focused on providing their customers with no overseas purchasing or tariffs, the ability to avoid injection molding cost and speed up design to production times by 1000+% as well as eliminating excessive inventory.

MERIT3D.COM



400 Hangers
produced per
platform



Production time
of 225 minutes
per platform



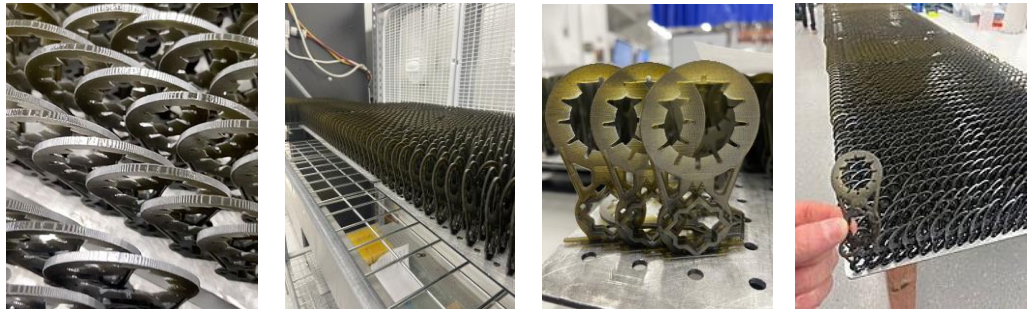
Low energy
consumption
printers provide
increased
sustainability

Challenge: Produce over one million epoxy cartridge and mixing nozzle hangers at both a low cost and in a short time-frame.

Merit3D offered a solution to the challenge by modifying the molding design and optimizing it for Additive Manufacturing. Specifically, the company optimized the design for Photocentric's Liquid Crystal Magna printers using BASF Forward AM's [Ultracur3D® EPD 1006](#). The iterative redesign process took a total of two weeks and resulted in a design that could be 3D printed both efficiently and cost-effectively. Merit3D used 20 printers to manufacture the hangers, producing 400 hangers per platform and taking 225 minutes per platform. This innovative material provided the ideal properties required for the part and passed the brutal durability test.

“This is a huge step in the development of manufacturing to replace injection molding as we see large companies replacing their current manufacturing processes with additive manufacturing parts.”

– Spencer Loveless, CEO at Merit3D



Challenge: Create a design that would eliminate the need for additional Stock Keeping Units (SKUs)

Merit3D presented Adhesives Technology with a design iteration that could act as a universal hanger because it would work on two products that previously had distinct hangers. This additional benefit obtained by utilizing Additive Manufacturing and Ultracur3D® EPD 1006 was the elimination of an additional hanger that Adhesive Technology produced via injection molding, as well as the shipping and storage of that part, which resulted in a cost savings for the company.

Learn more about Ultracur3D® EPD 1006:

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