

Blackmer Revamps Product Design Process with 3D Printing

For over 100 years, **Blackmer** has been a global leader in the manufacture of positive displacement pumps, centrifugal pumps and compressors for the transfer of liquid and gas. Blackmer has become the choice of industry leading companies around the globe due to the superior efficiency and reliability of its products. Through a global network of distributors and original equipment manufacturers, Blackmer serves a wide range of industries, including refined fuels, pulp & paper, oilfield, wastewater, food/sanitary, military/marine, transport and chemical process industries.

Blackmer relies heavily on product engineering to serve its varied customer base. Its product-engineering department is responsible for developing new products and parts, analyzing existing products and parts, and developing all of the models and applications in the design process. The department, using feedback from its marketing and sales force, generates new and advanced product designs to better meet its customer needs.

For several years, the design process at Blackmer involved outsourcing product designs to a standard pattern shop. The standard pattern shop would take order requests from the department and construct wooden or aluminum patterns the Blackmer engineers used to evaluate part designs. Unfortunately, using an outside service bureau created unnecessary time restraints that inhibited the product design process. Blackmer needed a more time efficient solution.

The Dimension Solution

Blackmer sought a solution that would reduce the overall time spent on product turnaround. The company needed to find a way to produce durable,

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— Mike Hedgecock
Engineering Services
Administrator, Blackmer



flexible models on-site to simplify its design process and minimize the time spent on projects.

Blackmer researched a variety of options, and finally chose a 3D printer from Dimension. After bringing the 3D printer on board, the product engineering staff immediately saw results – its design process was changing for the better.

“The Dimension 3D printing saved us four to six weeks in product part turnaround,” said Mike Hedgecock, engineering services administrator for Blackmer. “Since its purchase, we have been able to bring our products to the market much faster. We now use ABS plastic parts in the design approval process and our design process has changed completely.”

By constructing physical models of new product parts on-site, the department is able to test the form, fit and function of products immediately. In addition, the models created can be placed into the product until a permanent part is produced. The new design process eliminated unnecessary steps and enabled the department to make modifications after evaluating a part.

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An essential tool for everyone on the design team. Dimension 3D printing can help you quickly fine tune designs and cut weeks – even months – from your development schedule. Now you can test form, fit and function and explore as many design iterations as you like – over your network, right from your desktop.

**Dimension 3D Printers
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