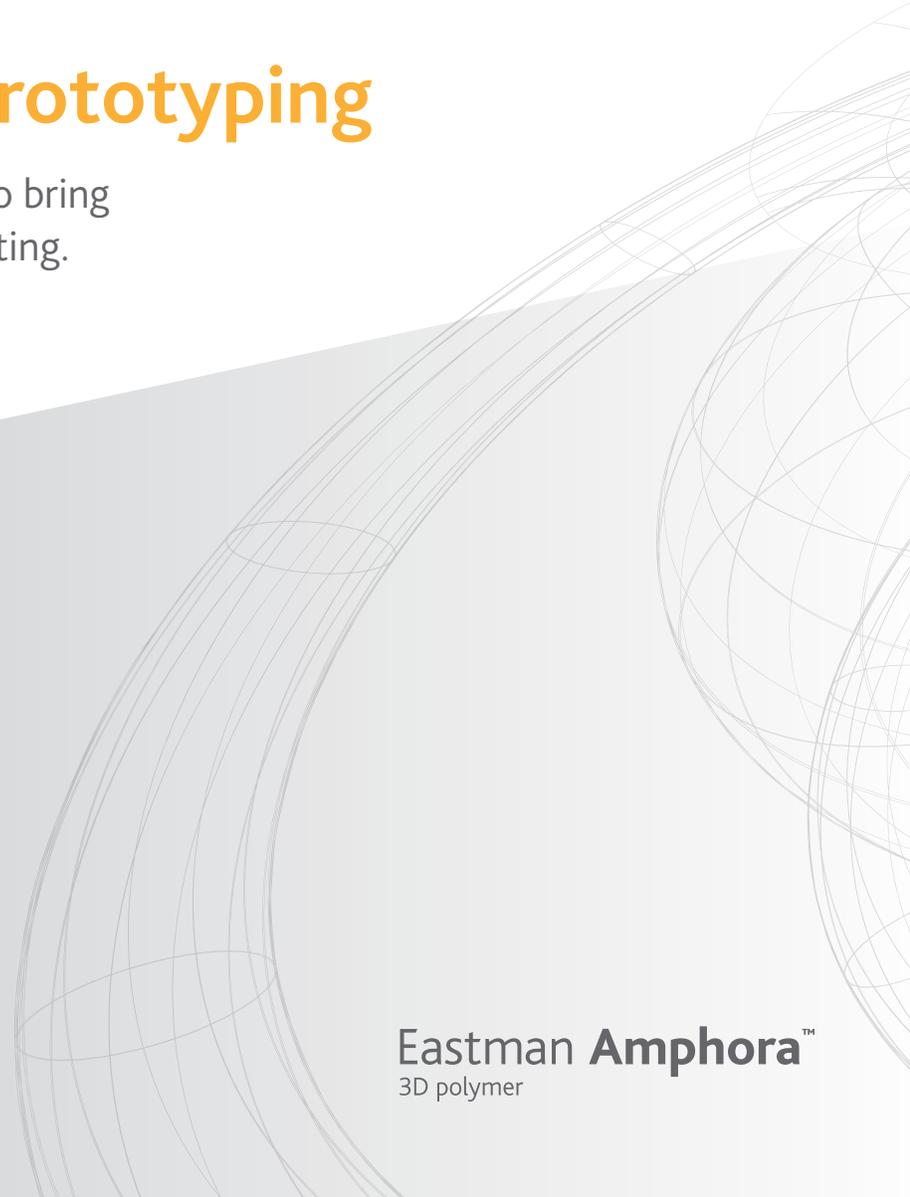




3D printing for prototyping

Chic Conception enlists Eastman to bring artistic designs to life with 3D printing.





Creative ideas, challenging designs

Stéphane Chicha, owner and designer at Chic Conception, has a vision for his products—uniquely beautiful. The French company is passionate about making drinkware that is elegant and pushes the boundaries of unique design.

Typical prototyping of the company's many inventive designs was expensive and time-consuming. It required multiple outside companies and weeks of back-and-forth conversations about the design to move forward with product development. Chic Conception started using 3D printing to bring their designers' creative ideas to life quickly. With 3D printing, Chic Conception was able to quickly prototype new ideas in-house and adjust the designs as needed, making modifications for a better look and feel.

To make the prototyping process even more efficient, Chic Conception enlisted help from Eastman Chemical Company and its combined expertise in high-performance materials for durable products and 3D printing filaments. Chic Conception and Eastman already worked together on the company's end products made with Eastman Tritan™ copolyester, so it was natural to collaborate on prototyping.

For prototyping with 3D printing, Chic Conception began using colorFabb XT-Copolyester made with Eastman Amphora™ 3D polymer, a low-odor, styrene-free choice that is uniquely suited for 3D printing applications and similar to Eastman Tritan™ copolyester. With colorFabb XT-Copolyester, 3D printed items can be more functional, durable, efficient, and attractive than when printed with traditional filaments. This allowed the company to 3D print prototypes with a material that was similar to the final product and then more thoroughly test the designs.

"In-house 3D printing is the best way to unleash and validate the creativity of a very artistic person like Stéphane Chicha," says Ludovic Gardet, senior associate application development, Eastman. "Being able to use a material that not only looks but also feels just like the material used in production is a real advantage."

Artistic freedom

Chic Conception has worked with Eastman using the Ultimaker 2 3D printer to develop small tasting glasses, glasses for specific alcohol manufacturers, skull-shaped drinkware, double-walled tumblers, and ice cream bowls.

"We use the 3D prototyping process to see designs come to life. We used several filament colors during the process and for the development of different new product models, including our new double-walled graniti-style project," says Chicha.



"Tests on the prototyped designs allowed us to see the beautiful design, including color, and helped demonstrate the durability of the final product."

The return on investment for in-house 3D printing and prototyping quickly paid for itself. Chic Conception saw results from incorporating 3D printing throughout the entire product development process. Not only are they able to validate design ideas with prototyping, but the company is also able to improve the mold-making process through a better in-house understanding of the design requirements.

Now, with 3D printing, Chic Conception has the freedom to explore any design.

By using colorFabb XT-Copolyester, made with Eastman Amphora™ 3D polymer, for 3D printing, Chic Conception can count on a wide range of material qualities, including:

- ◆ Low odor and low emissions during printing at recommended temperatures
- ◆ Superior toughness required for truly functional parts
- ◆ Dimensional stability for strong, detailed items
- ◆ A high melt temperature for smooth flow through the nozzle
- ◆ Effective compatibility with colorants and additives
- ◆ Attractive gloss for lustrous creations



To read more about Chic Conception's products, visit www.chicconception.com.



For more information on colorFabb XT made with Eastman Amphora™ 3D polymer, visit www.colorfabb.com.

For more information, contact your Eastman representative or visit us at www.eastman.com/3D.

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