

*"Easy and convenient
to use."*

*-Ted Karl, Ted Karl
Designs I*

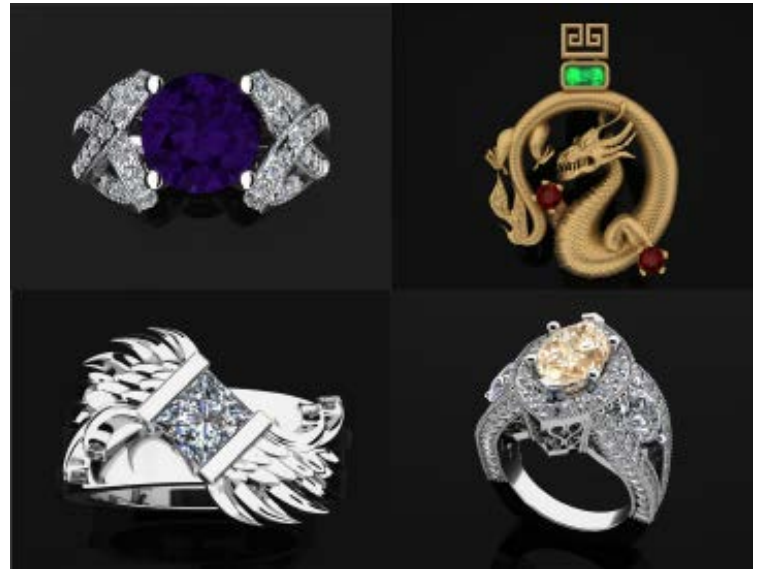
Case Study



Ted Karl Designs | Perfactory® Aureus

Ted Karl has been making jewelry since 1977, and a few things have changed since then. Karl carved master patterns in wax and used mills until 3D printing became a popular mode of manufacture for jewelers. "There are a lot of objects that cannot be made by a milling machine," he says, and when the industry began turning to computer-aided design (CAD) and machines that could reproduce those designs, Karl began researching the new tool of the trade.

was a limited number of 3D printers to choose that were up to the standard of jewelry manufacture. Karl particularly



required high quality and reproducible detail, and so he purchased his first EnvisionTEC desktop 3D printer eight years ago. Karl purchased the machine based on its capabilities as well as consumer confidence. A 3D printer tester gave Karl the following recommendation: "If you didn't want to play games and you wanted to make a living buy an EnvisionTEC machine." Four years later, Karl upgraded to a Perfactory® Aureus for its dependability, workhorse production, and ultimate functionality.

In addition to its great reputation, the Aureus supports direct casting. Karl completes his investment casting using gypsum that comes off easily in water: "It easily removes so the models can be used in a standard casting process for the jewelry industry."

Karl trusts EnvisionTEC 3D printer systems for completing the casting of

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In 2002, Karl sought a 3D printer that would reproduce detail that could be cast. Many of the available 3D printers were too expensive or otherwise unsupportable. "There weren't many other viable solutions," Karl said. There



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his designs and commissions due to tried and tested success. "I've been able to cast the EnvisionTEC materials with very good results since day one," he says, from the first instance when he experimentally casted sample PIC100 models. Karl continues to use PIC100 material to this day: "With a little bit of care and good practices this resin casts very reliably."



Though one of the first EnvisionTEC desktops was available near a decade ago, the performance of the Aureus is better than ever. The Aureus is not only a robust desktop 3D printer for jewelry, it also offers a strong return on investment. Karl designs bracelets, rings, engagement rings, and pendants, exports them to Magics, prints them with RP Perfactory software, and casts the pieces before sending them to clients. He's never had a failure with non-unified models, and supports his files in Magics.

Adding the Aureus to the workflow has also garnered Ted Karl Designs more

business. EnvisionTEC 3D printers for jewelry are capable of build complex geometries at the micron level. Milling machines can't achieve a good deal of the finer elements of design, including objects that have details on multiple side or hollow spaces. The Aureus, by contrast, reproduces detail "amazingly well."

In addition to strong performance, the technical support from EnvisionTEC has been provided excellent backing to the Ted Karl Designs business. "[The EnvisionTEC team has] always been



great." Karl has received support from multiple technicians since his first investment in EnvisionTEC, starting from the day he received the machine. "I unboxed it, plugged two wires in with the power source and did a test print almost instantly."

Karl is happy with his Aureus and looks forward to 3D printing with EnvisionTEC in the future.

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About Ted Karl Designs

Ted Karl Designs offers jewelry computer-aided design, consulting, and manufacturing services for jewelry nationwide.

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