A Production 3D Printer Case Study
PRECISE AND REPEATABLE JEWELRY PATTERNS

3D Systems offers solutions to the challenges facing today’s jewelry manufacturers. Our 3D Printing technology increases design efficiency, improves product quality and reduces time-to-market. Integrating our highest resolution Stereolithography 3D Printers with our Accura Jewelry specialty material provides two options to a final product: direct casting of the pattern in the case of complex geometries or replace manually created silver masters for HTV and/or RTV molding.

Patterns for Direct Casting

Digitally design your master patterns for any type of jewelry. Where rubber and silicon molds are not an option due to design complexity or fragility, the use of stereolithography, SLA® master patterns produced with specialized material will reduce design time, maximize pattern accuracy and ensure precise replication through direct casting. SLA Master patterns provide unsurpassed accuracy, surface finish and fine feature detail to ensure the highest quality final product.

Patterns for Production Rubber Molds (HTV) and Silicone Molds (RTV)

3D Systems' solutions quickly turn digital CAD data into precisely manufactured master models, completely eliminating the need to manually create silver masters. The color of the build material allows easy visual inspection and simple de-molding. The digital production of patterns speeds up the design and manufacturing cycle and reduces cost by achieving exact wall thicknesses and maximum scoping to reduce precious metal usage. Beautifully detailed, even delicate jewelry - produced fast and affordably.