





A 3D Printing & 3D Scanning Case Study

Rod Mench Studios is a veteran-owned business specializing in creating memorable military award sculptures and statues. They contacted 3D Printing Colorado to investigate how 3D Printing and 3D Scanning could impact their work and if it could truly be used to help them reproduce custom sculptures.

The challenge was quite straight forward: Can we 3D scan sculptures and then 3D print a model for mold making and casting in various sizes using the 3D scan data? The captured scan data and the 3D printed version would need

to be very accurate and capture the detail of the hand sculpted work of art. Another important consideration was can it be done quicker and more accurately than sculpting the model by hand at the desired scale. This new workflow will allow Rod Mench Studios to increase revenues by increasing projects completed per year.

The resulting 3D Scans and 3D printed models proved that not only is it a valid option but a huge time and money saving plan that will allow Rod Mench Studios to complete more projects per year. As well as proving the concept we have discovered a few other added benefits for Rod Mench Studio including creating a digital library of all sculptures we have scanned and new business opportunities based on new technology and improved timelines and cost.

Matt Filkins | 3D Printing Specialist

3D Printing Colorado | www.3dprintingcolorado.com 6901 West 117th Ave. Unit 4 | Broomfield, CO | 80020 (303) 466-0900 | mfilkins@laserconcepts.com

Rod Mench Studios rodmench.com | 719-380-1126 P.O. 38182 | Colorado Springs, CO | 80937







Step 1 - Scan

Step 2: Scan Cleanup & Print Preperation



3D Scans captured using an **Artec Spider**



Step 3 - Print, Cleanup and Fuse



The 2 printed halves were Fused together using SureHold Cyanopoxy Adhesives





Model Printed with a CubePro Duo in 2 Parts using PLA and Infinity™ Rinse-Away support material



Step 4 - Deliver Perfectly Scaled Model!