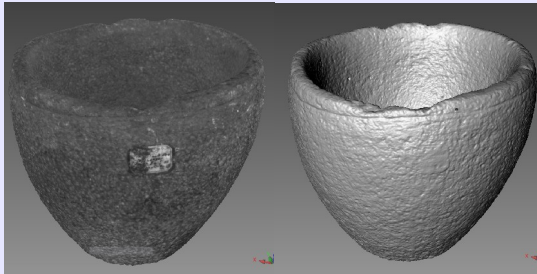


3D Scanning Makes History

Background

When a client came to us with a request to scan articles of historical and scientific significance, with exceptional detail, we wanted to make a big impact on tiny objects. We were allowed access to a private collection of artifacts, and used the two pieces to showcase the ease of scanning with the automatic turntable and the Flexscan HDI Advance series, and the incredible detail possible with Macro scanning

Our Process



We chose not to use any surface treatment for the demonstrations scans. Materials like stone scan exceptionally well with structured light technology, and there was no need to prepare the surface. We used the HDI Advance R2, configured to capture 12" and our automated rotary table to complete the scan quickly, and with stunning detail.

For the spear tip, we used an HDI R3 Advance Color, configured for macro scanning. The spear tip was manually positioned to capture both the front and back, with special attention to the sharp cutting edge. No surface treatment was used.



The Results

The bowl was placed on our automated rotary table, and captured in less than 5 minutes. We added a few more scans of the top and bottom surfaces to complete the scan, and the entire process, with all post processing to the scans in the photo to nearly 20million data points was completed in less than 20 minutes. The scan captured the texture of the stone, as well as the decorative carving details around the perimeter. On the spear tip, we were able to resolve details down to .04mm (.0015") with exceptional accuracy, and full color as well. The scan not only showed the texture of the stone and natural structure, but picked up a crack that had indicated a repair had been performed somewhere in the history of this artifact.