Biomedical

Name: Ethan Broadway
Company: Advanced Biologics
Location: Carlsbad, CA
Industry: Biomedical
Background: Radiological Science and Physics, Specializes in MRI and CT

Challenge:
Obtaining precise data scans of small bio-objects with cost-effective equipment

Tools:
DAVID SLS-2 3D Scanner

Results:
Captured precise, small bio-object digital data at 1/3 the price of other market scanners

Challenge

Before 3D scanning, medical developers invested countless hours and effort into manually obtaining detail from bio-objects, trying to replicate them for research purposes and applications. This was challenging at best, since accurate precision is virtually impossible with tactile measuring instruments when the object being studied is organic in nature.

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Even with modern 3D scanning options available, California-based Advanced Biologics was similarly investing time and money into retrieving object data and receiving poor results due to outdated methods and inferior technologies. The company saw the DAVID SLS-2 3D scanner as an opportunity to radically simplify the acquisition of high precision object scans while saving money, thanks to its speedy operation.

"I knew I would be scanning small objects and that DAVID would scan accurately," said Ethan Broadway of Advance Biologics. "I had worked with other high-end scanners that did not deliver the desired results. DAVID has done such a great job that it is now our primary scanner."

Broadway successfully scanned small objects with the SLS-2 and imported the measurement and volume data into software for further research. A key feature in this process is DAVID's advanced spatial evolution, since it can scan very small objects, yet produce accurately detailed and precise results. DAVID offered flexibility in scanning items of all shapes and sizes and has become the company's go-to scanning solution.

The Tool

- The DAVID Vision SLS-2 3D Scanner is a professional 3D scanning system that digitally captures physical objects and generates an analogous 3D model. Capable of scanning items from 60 to 500 millimeters in size, It is highly accurate, able to achieve precision up to 0.1% of scan size (0.06 mm). Extremely efficient, it can produce up to 1.2 million vertices of mesh density per scan, within a few seconds. Equally as important, it does this at a fraction of the cost of similar handheld competitors.

The Success

Scanning results for Advanced Biologics have been so precise that the company uses its DAVID SLS-2 3D scanner for all scanning assignments. It developed a protocol specifically for working with its DAVID SLS-2.

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DAVID is one of the technologies set to improve the scalability and productivity of research in the biomedical field, offering researchers an affordable and effective solution to a problem as old as the industry itself.