growshapes

Medical

Name: J. Rusty Hitch
Company: Beckman Coulter
Location: Indianapolis, IN
Industry: Medical Device Development
Background: Mechanical Engineering

Challenge:
Obtaining precise digital replicas of existing medical equipment for prototyping research

Tool:
DAVID SLS-2 3D Scanner

Results:
Accurate and affordable 3D scans that could not be produced with Kinect-based solutions

Challenge

The medical industry's ability to improve patient health relies heavily on advances in Medical Device Development – a term used to broadly describe the cycle of research, innovation, engineering, regulation and marketing of medical devices. Beckman Coulter, a US-based company specializing in the field, has made a name for itself by introducing products that simplify, automate and revolutionize complex biomedical testing. In order to stay ahead of the competition, Beckman Coulter engineers always seek to optimize their workflow.

A challenge this company initially faced was obtaining three-dimensional data from older medical device models at a cost-effective and timely rate. Hand-held 3D scanners were beyond the budget and existing device specifications were needed to proceed with research in the lab. Failed attempts with lesser 3D scanning systems led to the purchase a DAVID SLS-2 3D Scanner.

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"We had worked with Kinect-based tools with no success," said Rusty, Senior Manager Hardware Engineering. "We found DAVID to be an affordable and reliable product to have available for use at any time in the lab."

The Tool

- [Growshapes Online Video Tutorials](#)

- 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

"The scan results were precise enough for our DAVID Vision SLS-2 to become a permanent tool."

Now a reliable component of R&D, the DAVID SLS-2 has accelerated Beckman Coulter's product development cycle while staying within budgetary constraints. More time is available to focus on innovation and less is spent on technological barriers. Medical Device Development is just one of many industries taking advantage of the DAVID line of products.