



beam™
suitabletech.com

“ Our Objet 3D printer from FATHOM™ has been invaluable in the development of Beam and other products. It allows us to quickly and conveniently create functional prototypes and mock-ups in-house at a far lower cost than if we used outside vendors. ”

— Stephanie Lee, Mechanical Engineer
Suitable Technologies

FROM 3D PRINTING TO DIGITAL PRESENCE

Faster Cycle Times and Lower Costs Help Engineering Team Meet Tight Product Development Deadlines



CHALLENGE

Suitable Technologies is the leading developer of remote presence technology and robotics. The company needed to develop a specialized audio dampening component that would enable users to talk through the system and hear people near the device without interference of noise from the motor as it is remotely driven. To meet the engineering team's tight deadlines, it was critical that the 3D printer be capable of creating a dozen prototypes with unique geometries on a rapid scale with quick turnaround.



PRODUCT OVERVIEW

Beam is a remote presence device (RPD) comprised of three components: an all-in-one monitor and audio system, charging dock, and software that provides users with an interactive way of connecting remotely so people can be in two places at the same time over a WiFi or 4G connection. The system includes two wide-angle HD cameras, six-microphone array that cancels echo and reduces background noise, 17" screen, powerful built-in speaker, speed range up to 3 mph, and eight hour battery life.



SOLUTION

The Objet24 Desktop 3D Printer by Stratasys from FATHOM™ made it possible for the engineering team to successfully develop a mobile audio system on schedule, resulting in a faster cycle time of 1-2 days and lower costs saving \$35,000 that would have been spent on outsourcing. The engineers were faced with a number of unique challenges that needed to be solved quickly, and the Objet system was able to keep up with their demand for complex parts and components. Cycle times were completed so quickly that engineers had more time than expected to work on non-3D printed pieces.



POLYJET TECHNOLOGY

Achieve smooth surfaces, thin walls, and complex geometries when using 3D printers driven by PolyJet Technology capable of 16-micron layers with accuracy as high as 0.1 mm — the one and only technology that supports a wide selection of materials with properties that range from rubber to rigid and transparent to opaque.