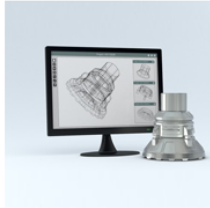


HIGH-QUALITY 3D MODELING FOR AN INTERNATIONALLY-RENOUNDED CLIENT



Flatworld Solutions provided efficient and cost-effective 3D modeling of aluminum cast products in just 45 days

The Client

Flatworld Solutions was contacted by a company that develops innovative, custom engineered aluminum and fiberglass overhead utility and communications solutions products for communications companies, electric companies, and other clients.

The client contacted Flatworld Solutions looking for a partner that could help them re-design and manufacture one of their products. They also needed a partner that could engineer the design at a low budget, without sacrificing on accuracy and one that could complete it within 45 days.

Our ability to respond, history with this type of engineering, and affordability convinced the client to select the Flatworld Solutions team.

The Problems

The Flatworld Solutions team encountered many challenges with the project. Some of these challenges included -

- + Missing Specifications - The aluminum cast product that was to be re-designed was missing its specifications, which were necessary to create both 3D drawings and 3D modeling.
- + Missing Grooves - The internal grooves of the product were unavailable. This would lead to challenges in scanning the product for analysis.
- + Limited Timeframe - Because the specifications and grooves were missing, the ability to meet the 45 day deadline would be put to the test.

The Solutions

Modeling can be a difficult and time consuming task that requires only the most highly trained experts, so we began the project by first performing a paid trial project and sending it back to the client for review. The client was satisfied with the trial project and requested that Flatworld Solutions continue.

Flatworld Solutions assigned 2 resources to the project, both experts in the field. The client then sent 3 physical samples to the Flatworld Solutions team, along with the measurements and specifications of the products. The Flatworld team then used a 3D scanner to scan the products, and collected the point cloud data.

Using SolidWorks, the team then completed surface modeling for the product. Throughout the process, the QA team consistently monitored for quality and accuracy, and approved the final designs.

The Results

Flatworld Solutions was successfully able to complete the project within the 45-day timeframe, with a reported accuracy level of over 90%. The solution was well received by the client, as they were pleased at both the quality of the final deliverable, and the cost with which we were able to complete it. The client was so satisfied that they recommended Flatworld Solutions to their business partners.

For more information about our [mechanical engineering services](#), or any of our [engineering and design services](#), [contact Flatworld Solutions today](#).