Reverse Engineering & Manufacturing Transfer Result in Cost Savings, Reduced Risk, and Increased Security

CUSTOMER SITUATION

CASE STUDY



A leading global animal health company came to Viant for help with the manufacturing transfer of IV sets & accessories. These products were being produced in a nonregulated environment in China, and the company was looking to reduce supply chain risk. The company owned the designs but did not have 3D design files or 2D prints.

The customer chose to work with Viant because of its reverse engineering design expertise, extensive manufacturing transfer experience, and its ability to support product production in China. Another factor was Viant's vertically integrated extrusion of medical tubing, a key component of the IV sets.

VIANT SOLUTION

The Viant team leveraged its product design experience to reverse engineer 35 components, using in-house inspection as well as laser and CT scanning to get accurate 3D geometry. Viant then created 3D parametric models with linked 2D component prints and 14 associated assembly prints. Next, the team produced prototype components using both stereolithography (SLA) and additive manufacturing methods for testing.

Finally, the Viant production team built and validated production molds and assembly lines capable of manufacturing the IV sets and accessories at its China facility.

RESULTS

Viant successfully reverse engineered the customer's IV sets and accessories and transferred manufacturing to its facility in China, with deliverables including 3D databases, 2D prints, and a fully validated production process. The result was 15% cost savings, reduced supply chain risk, and increased intellectual property security.



