ToughWare Prosthetics

Gain 10x Reduction in Cost and Consistent Delivery Schedules

Maker of prosthetic devices uses ExOne additive manufacturing to cost-effectively configure complex part designs.

Customer Challenge
Compete with investment casting and conventional machining for the production of prosthetic hand components.

The Solution
Additive manufacturing using ExOne’s 3D metal printing technology, in stainless steel/bronze matrix parts.

ExOne’s Competitive Advantage
Faster production time, significant reduction in costs and the ability to configure complex part designs that cannot be cast or conventionally machined.

About ExOne
ExOne offers digital part materialization using three-dimensional printing to create full-form parts directly from CAD data for a variety of applications. The technology is capable of a geometric complexity unachievable with conventional manufacturing methods.

Components produced by ExOne can reduce weight, integrate multi-piece assemblies, enhance product functionality and significantly reduce lead times for prototype and short-run production.

ExOne operates facilities across the Americas, Europe and Asia.

Specifications
Customer: Invisible Hand, LLC (ToughWare Prosthetics)
Part: Terminal End
Batch Size: 8-40 pieces
Part Size: 1-5 inch

Traditional Method
Investment Cast or Conventional Machining
Time: 2 to 8 weeks
Cost: $250-$1,500 each

ExOne® Metal Printing Method
Time: 2-3 weeks
Cost: $25-$150 each