

\*\*Take the part straight from the machine and mold it. It's incredible."

- Jim Hollister, LSR 3D Lab Manager

# A radical shift

LSR is a global leader for enabling advanced wireless technology platforms with product design, from inception through manufacturing. By incorporating Solidscape® wax pattern masters and mold faces into its process, LSR has been able to cut urethane casting production time by up to four weeks while consistently realizing a five-figure cost savings.

"For over 30 years I have watched the birth and growth of the rapid prototype industry," says LSR's 3D Lab Manager Jim Hollister. "The Solidscape process represents a radical shift in the way things are done ... we are excited to give our customers the best of the best."

Solidscape's high precision 3D printed wax patterns enable LSR to accurately produce fine details and a smooth surface finish for complex geometries that have been impossible to achieve with machined parts or traditional tooling methods.

# LSR

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## Industry

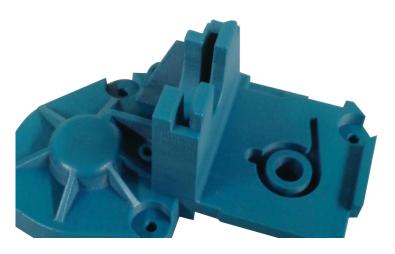
Precision Manufacturing

#### **Customer Needs**

- Lightning fast prototyping
- Savings time and money
- Fine details
- Minimal finishing
- High quality, better-thanproduction parts

## **Benefits**

- Better deliverables
- Lower costs
- Higher profits
- Speed to market
- Watch-like detail
- High resolution
- Little to no finishing
- Handles complex geometries
- Castability
- Show-quality models





Mold Cast Finish

# A repeatable, profitable process

Urethane casting is a prototype process for creating from one to 1,000 prototypes of traditional plastic injection-type parts. Solidscape collaborates with the LSR 3D Lab to create complex 3D printed industrial part wax masters. LSR produces silicone molds directly from the wax masters — no finishing required — and then builds urethane casts from the silicone molds. This process takes a little over two weeks to complete, compared to a seven-week turnaround time with the conventional mold method.

"The parts created out of silicone tooling, when done correctly, will be the best you will ever see," asserts Hollister. "These parts will make people look twice to see if they come from a metal tooling."

# High resolution results

The Solidscape process is additive and subtractive. It lays down a very thin layer of build and support materials then mills off each layer, creating high resolution parts up to  $5,000 \times 5,000 \times 8,000 \times 8,$ 

"Our goal is to make better quality parts than production," asserts Hollister. "So a high quality 3D printed pattern directly relates to less finish time and better results." Those results include happy customers, reduced costs, higher profits and shorter lead times.

If This partnership allows us to offer our customers groundbreaking technology and quality.

Getting better breakthrough products to market faster is what sets LSR and Solidscape apart from the herd.

Jim Hollister



# Solidscape<sup>®</sup>

High Precision 3D Printers

Solidscape is the leading manufacturer of high-precision 3D printers, materials and software for rapid prototyping and manufacturing.

www.solid-scape.com