

A LOT MORE THAN LIP SERVICE

Megalodon Sports relies on LulzBot to verify design and produce high-fidelity samples in record time.

Athletics meets technology

Athletes' bodies are worth a lot of money, many of them insured for thousands, perhaps even millions, of dollars. Generally, it's hands or legs that make the big bucks. But when you're talking about athletes' bodies with the owners of Megalodon Sports, they're especially focused on a different body part – mouths.

Megalodon Sports, co-founded by Korey Gross and Bobby Seigle, is a startup company that designs, manufactures and distributes sporting goods and apparel. They began on their quest to provide unique yet practical products for athletes with one that protects their pearly whites — a mouthguard with a customizable lip protector. Megalodon Sports carefully designed its mouthguard over the course of nine months but hit a snag when it came to creating the prototypes they needed to sell to customers.

"It's been easy to see how our purchase translated to savings."

Korey Gross, Co-Founder, Megalodon Sports

"Initially, our prototypes were sourced by ordering from rapid prototyping and 3D printing firms across the United States and Great Britain," Gross says. "This proved very expensive. And we also needed to verify designs quickly so we could stay on our target schedule for full production and distribution."

After some research, Gross and Seigle purchased a LulzBot AO-100 so they could create their own prototypes. And just like their athlete customers, they were off and running.



Getting a head start

Before the AO-100, Gross and Seigle would spend anywhere from \$200-\$400 for each prototype they made. Gross says the printer paid for itself within a matter of months.

"We made a total of 14 prototypes," Gross says. "The first two were outsourced at \$206 each. The next 12 were printed on a LulzBot at \$5 each, saving \$2,412." And the savings isn't just about money.

"With the 3D printer, we don't have to add a week to our overall schedule for every sourcing prototype for every design iteration," Gross says. "It saved us seven to ten days of led time for each prototype."

Walking the talk

Because of Megalodon's newfound ability to physically produce prototypes to show potential clients, they truly have been able to put their money where their mouths are – or at least where they want their customers' mouths to be.

"Customers respond to a physical sample," Gross says. "We were able to meet our goal of verifying that our design was dimensioned properly to fit in and around an athlete's mouth. And beyond that, we met our secondary goal of creating high-fidelity samples for marketing purposes."

Megalodon has distributed mouth guards to several high school and youth teams and is receiving positive feedback.

"We've had a great experience with our printer and really appreciate the responsiveness from LulzBot when we've reached out," Gross says. "It's been easy to see how our purchase translated into savings, and it's been instrumental in our development process."

Megalodon Sports At a Glance

www.megalodonsports.com

Industry Sporting Goods and Apparel

3D printing application Prototyping a mouthguard

Key challenges Verifying multiple design iterations in a condensed schedule

Key benefits Cost savings and elimination of lead time

3D printing software tool chain SolidWorks, Slic3r, Pronterface

Material(s) used to print ABS

Operating system/computer system: Windows 7 and Windows 8

For more information on 3D printers, parts, and plastics, +1-970-377-1111 | sales@lulzbot.com 123 SW 12th Street, Loveland, Colorado 80537 USA LulzBot is a trademark of Aleph Objects, Inc.

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