



# Seeing was believing for Warrior Sports

## The Challenge

Warrior Sports is a leading manufacturer of innovative, high-performance sporting equipment, footwear and apparel for hockey and America's fastest growing sport, lacrosse. With a strong reputation for cutting-edge equipment designs, Warrior's dedication to technical excellence has allowed them to create what many feel is the best sports gear available, enhancing the performance of athletes in both Major League Lacrosse (MLL) and the National Hockey League (NHL).

The design-to-prototype process is critical to Warrior's success. Historically, field tested prototypes made from injection-molded plastics have been used - an expensive and often time intensive option for low-volume product runs. When Warrior's stereolithography (SL) supplier, Eagle Design & Technology Inc., suggested a new solution, SL-built prototypes made with Somos® NeXt, they were skeptical at first.

## The Solution

Could a SL model really withstand the rigors of professional field testing?

The answer was yes. After a successful wind tunnel evaluation, and a visual and flex inspection of a lacrosse head prototype made from Somos® NeXt, Warrior decided to give it a try. Using professional athletes, hard rubber balls of 5.25 ounces were caught and shot using the prototype heads; during this test game, high speeds (90 mph+) were achieved – and the Somos® NeXt prototype rose to the challenge.

"This is unlike anything we've ever seen before from stereolithography," said Tom Burns, Product Manager at Warrior Sports. "Using the Somos® NeXt head, we were able to simulate in-game scenarios of repetitive throwing and catching at high speeds, where the prototype performed almost exactly like a production head. It's a testament to this material and how far stereolithography has come. DSM Somos has delivered a resin that truly looks, feels and performs like a thermoplastic - we were amazed.

In the past, stereolithography resins used for prototyping were characteristically fragile and limited to dimensional and aesthetic product design evaluation. Not anymore. Somos® NeXt so closely replicates the physical properties of finished thermoplastic that it is often mistaken for the "real thing"- yet with all of the high-feature detail, dimensional accuracy and aesthetics that SL delivers.

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