## On the wings of an angel

In the heart of London, Covent Garden stands as a long time commerce center for this thriving metropolis. While the products being sold in the area are ever evolving, so are the many shop windows. When Oakley—recognized as one of the most coveted brands in performance technology and fashion—decided to refresh the look of their Covent Garden flagship store, they contacted the design team of Tony Kern and Hans Moritz to create a piece for their shop that would "deliver the unexpected."

Kern and Mortiz did just that — in the form of an angel — the Oakley Angel.

The design consisted of a twelve-foot tall angel with a twenty-five foot wingspan, however the challenge remained on how to best construct the sculpture. Oakley, headquartered in Orange County, California, turned to local rapid manufacturing experts Dinsmore and Associates, Inc. to help them create a show-stopping piece of art.

The design contains many separate pieces with intricate details and needed to be completed quickly, so Jay Dinsmore, President and CEO of Dinsmore and Associates, Inc., suggested using stereolithography as the main method for production. Stereolithography would provide the speed and precision for the project, while pairing the technology with the right material would give it the strength and longevity it required.

Dinsmore recommended DSM's Somos<sup>®</sup> ProtoGen 18420 as the material for the job. With its high heat deflection, low moisture absorption and stability over time, Somos<sup>®</sup> ProtoGen 18420 creates parts that can last for years.

"We determined early on that the only way to make this design work was to use stereolithography. After many years of working with Somos<sup>®</sup> materials by DSM, we are extremely pleased with the high performance, high quality materials they deliver," said Dinsmore. "This was the only product out there that could handle this project."

Seventy percent of the sculpture was created using Somos<sup>®</sup> ProtoGen 18420. Parts were made on stereolithography machines, cleaned and painted to resemble metal. The remaining thirty percent of parts were made with other technologies, including carbon fibre for the wings. All of the pieces were first assembled in California, broken down and then re-assembled in London.

The Oakley Angel greeted visitors at the grand re-opening of the Covent Garden O Store in April 2011. After three years of watching over the store from above, the fifteen hundred pound angel still keeps its shine and remains a popular attraction.

"The Oakley Angel has brought a lot of foot traffic through our doors resulting in increased sales of 20-30%," said Gareth Potter, Manager of the Covent Garden Oakley Store. "We couldn't be happier with the success of this project and look forward to many more."

