

# Sundog

Eyewear



Images courtesy of Sundog Eyewear

“The detailed control over the surfaces in Evolve allows me enormous modeling freedom without complexity.”

Michal Hrk,  
Sundog Creative Director

**SUNDOG EYEWEAR** is constantly changing to provide products that fulfill its commitment to genuine performance in terms of outstanding value, impeccable styling, dependability and most importantly superior protection from the elements. The Sundog Eyewear approach to integrating different technologies in design and construction results in a higher state of quality that is both functional and innovative.

solidThinking Evolve helps to enable much of this innovation for Sundog. It allows Sundog's designers to start with an initial sketch, explore styling alternatives, and visualize new products with realistic renderings, all before exporting the digital models required by others in the product development process. For Michal Hrk this means “it allows me to get better products out to the market quicker.”

Michal had years of experience in the advertising and graphic design worlds before joining Sundog Eyewear as Creative Director. Over the past few years his role has evolved from traditional graphic design and communications to product design and styling of sunglasses for both performance-sport, and casual-lifestyle. Although he didn't have any formal 3D modeling experience prior to joining Sundog, Michal knew he needed to move from 2D Photoshop renderings of design ideas to detailed representations. This meant he needed a tool that he could learn quickly, “I was looking for something that offered simplicity in the user interface, ran on the Apple machines I was familiar with and could help me move rapidly from a 2D sketch to a 3D model. Once I found Evolve in 2009 I never looked back.”

Michal is particular when it comes to every detail of the product. With a 3D model created in Evolve he can now communicate even the smallest intricacies with people across the world, including suppliers. As Michal states, “If a picture is worth a thousand words, an exported geometry file that I share with our manufacturers is worth ten thousand. They can see exactly what the intent of a particular design is.”



## INDUSTRY

Eyewear

## CHALLENGE

Make the jump from a traditional process, based on 2D sketching, to a modern 3D modeling approach capturing all of the details of a production design.

## SOLUTION

Use solidThinking Evolve to explore styling alternatives, visualize new products with realistic renderings and export the digital model.

## RESULTS

- Evolve enables faster design times
- More exploration of designs now possible with an easy to use 3D modeling tool
- Better communication, especially with manufacturing facilities on the other side of the world
- Fast visualization of the final product using integrated rendering

One specific area of eyewear design that Michal has found Evolve excels at is the modeling of a wraparound style frame. "These glasses are not a simple geometric shape and require an organic modeling approach," says Michal, "the detailed control over the surfaces in Evolve allows me enormous modeling freedom without complexity."

An Evolve tool that provides an essential functionality for eyewear designs is the Stretch Tool. The tool allows the user to interact with complicated surfaces using a simple 2D approach. For example, it allows Michal to create a complex 3D surface and stretch it into a linear surface to easily apply precise trims for the final shape. It then allows Michal to re-apply the newly trimmed surface back into its 3D position. This allows Michal to integrate his 2D workflow into his 3D models, and enables him to work quickly and efficiently to create complex organic designs with the required precision.

**"Evolve gives me the ability to find alternatives and sometimes discover an unexpected and better end result."**

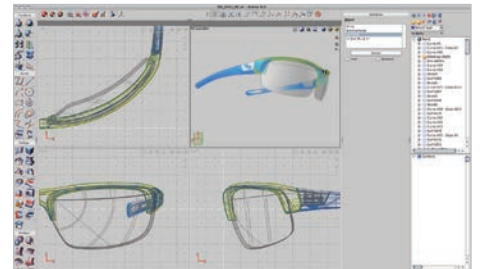
After moving to 3D with Evolve it quickly became apparent at Sundog that the new process allowed increased freedom to explore a design inside the modeling environment. "I have a picture in my mind that I want to come to as close to as possible" Michal told us. "My sketchbook is where I hash out the ideas behind a surface or shape before I move into 3D, but at the computer things don't always come together as planned, Evolve gives me the ability to find alternatives and sometimes discover an unexpected and better end result."

Among the features of Evolve that assist in the development of new designs and increase Sundog's productivity is the Evolve ConstructionTree. This advanced construction history feature provides huge flexibility in modifying geometry throughout the entire modeling process. "The power of Evolve comes when you want to explore a design a little further. I can go to edit parameter mode and move a point and change my geometry locally. It is a very organic way of modeling," says Michal.

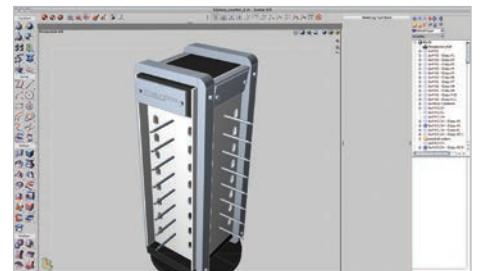
The fast creation of photorealistic renderings to preview a final production item is important to the design process, but its usefulness can extend well beyond that. "In at least one case we used an Evolve rendering in our marketing materials to show a new product before we had one manufactured or even a prototype!"



Rendering of Sundog Eyewear logo details on sunglass temple.



solidThinking Evolve user interface.



Sundog Eyewear display case designed in solidThinking Evolve.

#### ABOUT SUNDOG EYEWEAR

In business for over 30 years, Sundog Eyewear continues to provide its customers with genuine performance in eyewear comfort, protection and style. Regardless of what you do outdoors, you can be assured Sundog Eyewear will deliver exceptional performance in products that are genuine in their styling, workmanship and vision protection.



[www.sundogeyewear.com](http://www.sundogeyewear.com)

[www.facebook.com/sundogeyewear](https://www.facebook.com/sundogeyewear)

[www.twitter.com/sundogeyewear](https://www.twitter.com/sundogeyewear)



 [solidThinking.com](http://solidThinking.com)

 [blog.solidthinking.com](http://blog.solidthinking.com)  
 [youtube.com/solidthinking](http://youtube.com/solidthinking)

 [facebook.com/solidThinking](https://facebook.com/solidThinking)  
 [twitter.com/solidThinking](https://twitter.com/solidThinking)