

# Steve McGugan Industrial Design

## Consumer Product Design



Images courtesy of Steve McGugan Industrial Design

**STEVE MCGUGAN** is an award winning industrial designer based out of Denmark, with over 30 years of experience working in many different areas of product design. He received his education at the Art Center College of Design in Pasadena, CA. After, Steve worked as in-house designer for Bang & Olufsen in Denmark. During his employment at B&O, he designed the Form 2 headphones, which have become a classical icon after being on the market for over 25 years. In 1988 Steve founded his own design studio and has worked for several clients from around the world and in many different industries.

Being an industrial designer by trade, aesthetics are extremely important to Steve. Back in the 1980's when evaluating options for his first personal computer, Steve found the market to be saturated with many Windows-based machines that he felt lacked aesthetics. However, after noticing Apple, as well as evaluating the computer's user interface, Steve selected an Apple computer as his first. Steve's initial CAD-based platform of choice was a solid modeler which he used for many years, however, about 10 years ago, he determined it was no longer flexible enough to meet his demands.

While searching for a more flexible 3D-modeling software that would run on his Mac computer, a colleague of his suggested solidThinking Evolve. After a quick demo of Evolve, Steve was immediately interested in the software, he noted, "When I first saw solidThinking, I figured this would be much better to meet my needs, I liked its combination of solid and surfacing controls and really liked the parametric capabilities that my older software did not have."

In addition to the great tools and flexibility of solidThinking's software, Steve noted how impressed he has been with solidThinking's support and service, "What has impressed me most with solidThinking is the people behind it. Everybody at solidThinking has been so helpful in assisting me to learn and understand the program. It has really helped my learning curve to go sky high. For example, in 2012, I was given the assignment to design a hearing aid, which are very small and notoriously difficult to model due to their odd shape. I was very pressed for time on this assignment and needed some help with where to start, so I contacted solidThinking's support team who were able to quickly spend a couple of hours with me on a webinar to help me out."

"My favorite feature of Evolve is its ability to work in very complex surfaces and then quickly stitch them together into solids."

Steve McGugan  
Steve McGugan Industrial Design



### INDUSTRY

Industrial Design

### CHALLENGE

Design and model complex products using 3D modeling and design tools.

### SOLUTION

A design process incorporating solidThinking Evolve to model and design multiple different products for client review and handoff to manufacturing.

### RESULTS

- Creation of multiple different products spanning many industries.
- Simplification of client quoting and presentation.
- Improved communication with manufacturing teams.
- Closer and better collaboration between designer, client, and manufacturing.

## SOLIDTHINKING EVOLVE IN THE DESIGN PROCESS

With the great help and support Steve has received from the team, he now uses Evolve as his main 3D modeling tool and has become incredibly proficient in the software.

A recent project that Steve worked on involved a new building, the Elbphilharmonie Hamburg which is currently in construction. For this project, Steve's client tasked him with designing a set of salt and pepper shakers inspired by the architecture of the new building. Steve noted "The building's design is beautiful, it is very simple, minimalistic, and futuristic at the same time. The roof of the building has many wavy curves which is what inspired the design of the salt and pepper shaker set." To design the salt and pepper shakers, Steve used the spline-curves tool in Evolve to create the wavy designs influenced by the building's architecture. "In Evolve, this is very fun as the tool allows me to move and change these curves while I go," noted Steve. "I enjoyed making this set in Evolve, the idea behind the design is, while separate, the products look like very modern salt and pepper shakers, but when together in their stand, they strongly resemble the building itself. There is no way I could have designed or created these without Evolve, its flexibility allowed me to model the very complex shapes on the top."

The salt and pepper shaker set are currently being handmade in a polished stainless steel and are being sold in shops in Hamburg. Steve hopes that once the building opens in 2017, the salt and pepper shakers are used inside the building at one of its many restaurants.

Another project that Steve recently worked on was for a door handle. Steve noted "The geometry on the handle, especially for the transition on some of the curves is quite tricky and complex. Evolve allowed me to create this complex geometry and make it very smooth." Steve discussed another benefit of using Evolve for this project, "For this handle and many other products I make, when I send a proposal to my client company, they take my files and they use them directly for the tooling. My process with this handle was to design it in Evolve, and then send the files to the client, which they sent directly to China for tooling and manufacturing."

Steve also works on electronic components. Recently, Steve designed a very clean and modern looking Bluetooth stereo receiver for a client. Steve noted, "This product is a very simple shape on the outside, but on the inside I had to make many adjustments due to changing requirements from the factory on where to place the circuit board, buttons, and LED lights. solidThinking Evolve's construction history features allowed me to quickly adjust the design to meet these demands." As with the door handle, Steve used the direct output from Evolve to help communicate with the manufacturing team, he noted, "That is another benefit of Evolve, I use its files directly to send to the manufacturing team and talk with their software programs."

## WHAT'S NEXT

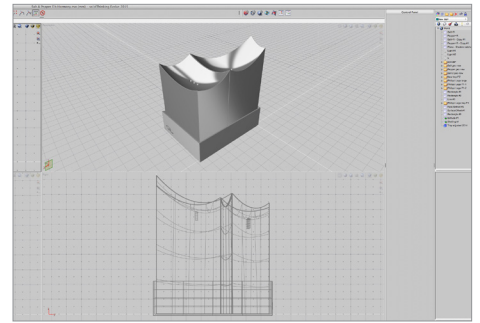
Steve plans to continue to use Evolve as his tool of choice when it comes to 3D modeling. He mentioned that he just received another hearing aid project where he is looking forward to the challenge of modeling the very small and complex shape.

Steve mentioned, "Evolve is incredibly fun for me to use, many times I like to just play and see what happens. Using the software, I find that many of my designs inspire other designs I create. I look forward to continuing to use it in the future."

### ABOUT STEVE MCGUGAN

Steve McGugan is an award winning industrial designer based in Denmark, with over 30 years of design experience, working in many different areas of product design.

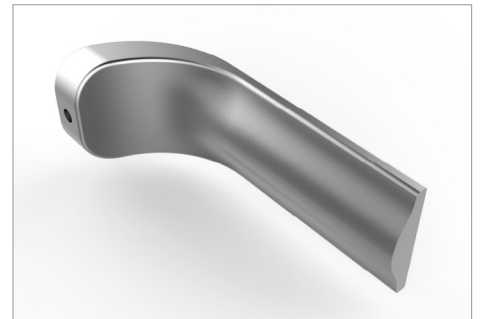
Steve received his formal education at the Art Center College of Design in Pasadena CA. After studying at Art Center, he began his first job as in-house designer for Bang & Olufsen in Denmark. During his employment at B&O, Steve designed the Form 2 headphones, which have become a classical icon after being on the market for over 25 years. In 1988 he founded his own design studio and has worked for many different clients from around the world. Steve enjoys travelling and his biggest goal in life is to design products that make people happy.



Modeling of salt and pepper shakers in Evolve



Rendering of salt and pepper shakers



Cabinet door handle rendering



Bluetooth receiver designed in Evolve

Steve McGugan Industrial Design  
<http://McGugan-design.com/>