

Camper: revolutionizing the design process for footwear through in-house 3D printing

Developing tangible models in-house through 3D printing has significantly accelerated the process of launching a new collection for the Spanish-based shoe company, while yielding considerable cost savings along the way.

[Video Link Camper 1](#)

With sales of up to 4 million pairs a year, [Camper](#) is one of Spain's most successful shoe companies, well known for their innovative designs and the comfortability of their models. At their headquarters in Inca (Mallorca), the company's technical department has streamlined the process of developing new collections by integrating desktop 3D printers. In-house 3D printing has significantly sped up their iterative design process, allowing for more creative freedom and accelerating their workflow while keeping costs under control.



The design team at Camper works with a 3-month deadline to create each new collection. With such a time constraint, they needed a fast, cost-efficient solution which would allow them to test and iterate multiple times, all while maintaining the

highest quality standards, in order to find the best possible combination of design and ergonomics for each pair of shoes, in line with their customer's demands.

Before the company started working with in-house 3D printing, they were outsourcing the production of physical models. This process was slow and expensive, taking up to two weeks to receive a prototype, and therefore iteration had to be reduced to the minimum and very few models were made, with most of the work being done through 2D digital designs limited to the screen environment.

Increasing creative possibilities through 3D printing

The incorporation of several BCN3D Sigma and Sigmax 3D printers meant for Camper a total revolution and a true streamline of this process: now designers can discuss which new shapes and details they are considering with the engineers at the technical department, who then convert these ideas into printable models and deliver them within 24 hours.

As Job Willemsen, Senior Designer at Camper, explains: *“Working with BCN3D printers is very useful because if we have an idea in mind, together with a technician, we can obtain quick and direct results for the dimensions of components. This enhances our ability to be reactive”*.

With various 3D printers on site, at Camper now they have new designs literally in the palms of their hands. This is a huge advantage for designers, because they can now validate volumes, dimensions and geometric shapes that they could not visualise with a digital model. If designers can print a shoe model in 3D the next day, the whole team has the ability to take their creative potential further.

The ease of iteration provided by additive manufacturing reflects on the work of the designers, who feel more at ease to take more chances and be more adventurous on their proposals. 3D printing then significantly increases the number of creative possibilities when it comes to designing Camper's footwear collections for men, women and children alike.



Achieving complex geometric shapes thanks to dual extrusion

The collections, which Camper designs around a year in advance, are geometrically quite complex, and designers need a technology capable of reliably reproducing each model to the detail. That is why they have chosen BCN3D printers, more specifically the [Sigma](#) and [Sigmax](#). In the words of Jordi Guirado, Product Engineer at Camper, *“because of the dual-extruder system, we can use water-soluble print material. As a result, we can work with more complex geometric shapes and reduce design time for the whole collection”*. And the large printing surface of the Sigmax ensures enough room to fit all parts manufactured at the plant, so that creativity is never constrained by space.



In-house 3D printing can revolutionize the way companies develop and produce parts and prototypes. For Camper, this technology has meant a boost to their creative possibilities, a significant acceleration of new product development and a cost-efficient solution for their iterative design process. Like them, designers and engineers around the world work smarter and innovate faster with BCN3D printers on their desktop or workbench. You can too, by [learning more about our products](#).

[Video Link Camper 2](#)