
SIPA HAS DESIGNS FOR YOUR NEXT SUCCESSFUL PET PACKAGE

Appearance is almost everything in the world of fast-moving consumer goods. Shoppers today rush up and down the aisles, looking for things they know they want. So if you have something new and different, it needs to hit them at a glance. Whether you have a good idea or not of what your next PET container should look like, SIPA has an arsenal of tools that can help you create something that will gain consumers' attention - and which can be produced economically and sustainably.

SIPA is an ideal partner when it comes to designing new containers because it has a team of experts who understand all the key parameters that need to be considered from the seed of an idea all the way through to a successful product. They consider not only the look of a container,



but also how the look fits with the identity of the packaged product, how the container feels and behaves, how easy it is to produce, how it performs on the filling line, in storage, and in transport, and of course how much it costs.

A typical design project can be separated into five steps. These start with the marketing brief from the client, which may include such diverse data as the history of the brand, the target market, an

analysis of competing products, and even ideas about the typeface to be used on the label. This leads to Step Two: hand-drawn sketches, concept ideas, and computer-generated 2D proposals. The bottle

begins to come alive in Step Three, with 3D renderings, mock-ups and animations.

3D printing is the latest weapon that SIPA's design experts are now using to quickly produce

prototypes that have a look and feel very close to that of the final product. 3D printing technologies are advancing rapidly, in terms of the speed at which they operate, the accuracy with which they can turn drawings into actual products, and also the choice of materials that are available to produce the prototypes.

Step Four tackles the feasibility of the product, with such engineering aspects as preform development, technical specifications, stretch ratio calculations, and shelf simulation all being considered. Finding the best shape from an engineering point of view involves several steps. The mechanical performance of the bottle is assessed with the help of Finite Element Analysis (FEA), which makes it possible to predict such things as top load strength,





internal pressure resistance, and crushability. Different geometries can be compared, as well as different weights of the same geometry. In the fifth and final step, technical drawings are finalized, preform and bottle production can be tried, and molded products put through rigorous laboratory testing to confirm computer predictions. Once this has been carried out to fulfilment of the customer's satisfaction, full production can begin. SIPA has accumulated years of experience working with its customers on the successful design and development of all sorts of

PET containers, for food and drink products, as well as non-food products. Recently, SIPA scored a significant success with its collaborative approach, when it helped bring to market a new PET bottle for a "premium" mineral water. This was an existing product, well appreciated in the market, but still packaged in glass. The customer wanted a design that would give the right quality cues, to convince high-end customers that the mineral water was a premium product, though no longer in a glass bottle. SIPA worked in a threesome, with the customer and an external consultant, on various

design concepts. Its challenge was to implement features such as sharp cuts and angles in PET, giving the bottle a cut-glass look. Without deviating far from the original proposal, SIPA produced new renderings that satisfied not only the customer's marketing needs, but also the functional requirements for the bottle. After the switch from glass to PET, the client gained 16% more customers, and also took a big step towards its targets in Corporate Social Responsibility. By choosing PET, it reduced its carbon footprint for the product by a massive 65 per cent.

