

# Reverse Engineering – Packaging

CONSUMER PRODUCTS

## What the Industry Needs

Reverse engineering is a process by which the design of a product is analysed or recreated using a physical part as a starting point. In packaging design, there are two fundamental objects involved: the product and its package. Consequently, reverse engineering in the packaging industry can require dimensions from both objects. When designing a custom package for a specific product, its dimensions can be extracted and used as a reference to build the 3D CAD model of the package. After this operation, the dies or the molds can be properly fabricated with the resulting CAD model. In addition to that, the molds, the dies and the packages themselves can also be scanned in order to extract part of the design or to do a 3D comparison with the reference CAD model for Q.A. purposes. The critical steps in reverse engineering are acquiring, accurately and efficiently, the dimensions of the object and extracting the necessary information from the resulting scan in order to create the new design with the correct features. In fact, in the packaging industry, the main challenge will always be to get the perfect fit.



## Advantages of the Handyscan 3D Solution

Reverse engineering calls for the acquisition of dimensions on parts of various shapes and complexity, potentially performed in **any kind of environment**. Due to its impressive portability, the Handyscan 3D can perform the acquisition directly in the design studio but also on the customer's site or on a production floor.

Since the designer wants to recreate the functional design of a part or build a package from an object, the acquisition must be accurate and give all the information needed to recreate a reference model for the part to be manufactured. The Handyscan 3D will provide **complete and accurate mesh models**.

The Handyscan 3D solution helps **save a considerable amount of time** compared to traditional measurement methods. Dimensions that are necessary for the reverse engineering process are quickly measured and are made readily available so that the designer can perform the work.

