



### What are sandwich cookies?

Sandwich cookies are biscuits composed of two layers (or more) of cookie that enclose a filling. The filling can vary depending on the recipe and preferences but commonly consists of sweet creams, chocolate, jams, or other tasty fillings. These cookies are known for their "sandwich" shape, as the layers of cookie resemble two slices of bread enclosing the filling.

# Application overview

# **SANDWICH COOKIES**

With SENSURE SYNAPSE, it is possible to **measure numerous product features** (a wide set is included in the system), such as shape, size, and colour, using **2D technologies** (industrial cameras) and perform a full 3D product profile using **3D technology** (laser profilometer). SENSURE solutions also allow for the inspection of the bottom part of products.

Thanks to the flexibility of the solutions, it is possible to **integrate the vision systems into existing production lines and to customize rejection mechanisms** (traps, air nozzles, robots, etc.) based on the size and shape of the products and the conformation of the line. Vision systems can also be **installed in different positions of the line** (after sandwich/capper machines or after the cooling tunnel).

Using **SENSURE SYNAPSE ensures reliable, repeatable, and accurate measurements**, even at high line speed, with the added benefit of all data being saved in a SQL database. It is also possible to **automatically adjust the parameters of individual processing stages** based on the analysis of their outputs and product information.

## Defects detection capabilities



**Bad diameter, oval, not centered**



**Top biscuit missing**



**Smudged cream**



**Top biscuit is inverted**



**Smeared surface**



**Cracked, broken or combination with visible or non-visible cream**



**Black spots**



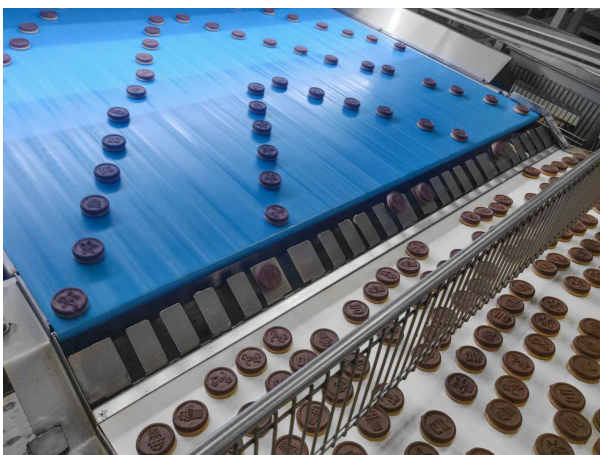
**Broken with visible cream**



**Triple sandwich**



**Inclined**



### Customized single or multiple rejection mechanisms

Choosing the right rejection mechanism (air nozzles, independent traps, retractable belts, robot, etc.) is important to ensure non-compliant products are accurately removed from the production line. To determine the most suitable option, it is important to consider several factors, such as: type and dimensions of product, how they are presented into the vision inspection system, line width and speed, space available, etc.