

# SMART VISION INSPECTION SYSTEMS for food products quality control, automatic rejection and data analysis

**S**ENSURE, a company based in Italy, has been designing and developing, since 2007, vision inspection systems with artificial intelligence which work in self-learning.

With SENSURE solutions it is possible to automate the process for the quality control of food products with the rejection, when required, of the non-compliant ones. SENSURE systems can also be used to optimize the pick & place activity, sending the products gripping coordinates to Robot and PLC communicating also quality information for the automatic sorting. All SENSURE solutions allow real-time display and monitoring of measured values and collect the data of all production, supporting

the continuous process improvement activity.

SENSURE STARGATE is the family of products developed by SENSURE which maintain the entire process under control, increase line productivity, and reduce operating costs for Customers in different industries with highly variable products (bakery, snacks & confectionary, meat & poultry, seafood, etc.). The core of the STARGATE family of products is the SENSURE SYNAPSE software, with thanks to artificial intelligence and self-learning, guarantees the best quality control. AI makes up the core of the system and enables it to perform various functions such as the automatic selection of the features to be controlled in the products, and the

optimization of the tolerances for the controlled measurements.

SENSURE SYNAPSE can measure and control numerous product features, such as shape, size, colour, and surface pattern using 2D technology (industrial cameras) and perform a full 3D product profile using 3D technology (laser profilometers). With SENSURE SYNAPSE all the measurements are reliable, repeatable, and accurate also at high speed (up to 200 products per second).

## STARGATE-Series solutions

SENSURE vision inspection solutions (STARGATE series) control a specific production process step (mixing, forming, proofing, decorating, baking,

packaging, etc.) along the whole production line.

SENSURE STARGATE vision inspection systems, all supplied with the innovative SENSURE SYNAPSE software, can have two different configurations:

### 1. STARGATE SL (Single Line) -

Solutions for the quality control of products on single row (conveyor width up to 0,4m/15").

### 2. STARGATE ML (Multi Line) -

Solutions for the quality control of products on multi rows (conveyor width from 0,4m/15" to 4m/170").

Both the SL and ML have a small footprint, standard and modular version, with a rejection system already included, which can fit into tight spaces with minimal modifications to existing conveyors (STARGATE SL-C and STARGATE ML-C).

Both the SL and ML solutions can also be easily integrated IN-LINE (even already existing) equipped with a rejection module to automatically remove non-compliant products or they can be installed OVER-LINE on existing conveyors and used for continuous measurements of products (Bolt in place, plug it in and ready to use). An OVER-LINE solution is easy to install and operate and can be up in running very quickly: thanks to these solutions is possible to know more about products compared to manual methods and it is possible to make quick decisions and adjustments to the production line using the analysis data.

The IN-LINE and OVER-LINE vision systems provide continuous and quantitative data which can be used to identify process issues, make real-time changes, and create a library of information for analysis.

The SENSURE STARGATE can be tailored to suit the specific application and production line, with the configuration options of the number of cameras, type of mounting frame, rejection mechanism (air nozzles, traps, retractable belts, pushers, etc.), etc.



The STARGATE-series solutions are designed to be quickly installed into any new or existing production line, can be fully food grade and ready for harsh wash-down environment. The systems have also the possibility of exchanging signals and information with conveyors/machines/systems in the line.

Additional conveyors before or after the system can be designed and installed by SENSURE to make the overall solution a perfect fit. 🏠

Visit:

[www.sensure.it/en](http://www.sensure.it/en) and  
contact us at [sales@sensure.it](mailto:sales@sensure.it)

