Quality control by laser

SIQ-C
3D scanning by laser

Easy solutions for complex problems

Quality control process

Artificial vision technology is a type of artificial intelligence (AI) that detects, processes and projects images of the real world in the computer. This technology allows us to detect objects giving inputs of the characteristics of the object and then to search for objects with these characteristics.

MCR are specialists in artificial vision systems for quality control and inspection of components. For this purpose, we design systems that recognise patterns and shapes, detect defects and analyse colour. We are committed to the use of new technologies and advanced techniques based on artificial intelligence systems.

Propierties

- To be able to examine products manufactured one by one in real time, without having to slow down the lines.
- Avoiding physical contact with the product during verification.
- Guaranteeing that all the products are within acceptable quality margins.
- To remove any non-compliant product from the line.
- Avoid customer complaints and returns.
- Optimize human resources.

General Info

NAPOLITANA CREMA RAPID

Data Interval 30 min

Line Speed: 10,0 mts/min

	Ok	Warning	Error
Total Pcs	47685	380	2553
Shift Pcs	47685	380	2532
	Interval	Hour	Shift
Box X Hour	542	560	546
Pcs X Hour	45.538	46.998	45.874

Counters

	Ok	Warning	Error
Height	22298	29	41
Width	22237	34	97
Lenght	22334	28	8
Total	22133	89	146

Statistics

	Min	Mean	Max
Height	1,70	1,70	1,98
Width	4,50	4,50	4,70
Lenght	10,00	10,00	10,50
Ok		Warning	Error

We carry out complete integration of vision systems for made to measure applications at all levels (electrical, mechanical, programming, customised software, etc.). With our know-how regarding the incorporation of artificial vision, we will help you increase productivity in your business, optimize the resources of your installations, reduce manufacturing costs, avoid human errors and increase the final quality of your product.

We carry out a rigorous prior examination of the application we are going to develop, the lighting conditions and all the factors that may affect the development of the solution in order to decide which is the best system to implement.

MCR has developed two different systems with artificial intelligence technology, which together with MCR's proprietary software can control the traceability of components. These equipments can be customised according to the customer's needs by offering also options of accessories for rejecting and grouping for packaging.

By laser

SIQ-C equipment carries out quality control on a production line with artificial vision by laser, executing 3D scanning and thus detecting and counting the correct and incorrect components .

By image analysis

COPIV-1 equipment carries out quality control of components by artificial vision using a camera that periodically captures images and those are regularly sent to a computer, which with the MCR application, processes them, detecting, counting the correct and incorrect components and/or validating the batch for packaging.

BY LASER
SIQ-C

Introduction

SIQ-C equipment carries out quality control on a production line with artificial laser vision, executing 3D scanning and thus detecting and counting the correct and incorrect components on the line or for preparing for packing.

Food   Chemical   Aeronautical   Industrial

Advantages

1. Information management
The SIQ-C equipment collects and analyses the values extracted immediately for the process analysis.

- Easy to understand graphics with the important variables as requested by the customer.
- Duration of downtime, counter and percentage of operability
- Counter of correct and incorrect components and percentages, speed of production, intervals between trays and empty spaces.
- Statistics as average values, standard deviation, maximums and minimums.

Enables you to evaluate variables such as wear and/or malfunction of the machine (preventive maintenance)

2. Additional systems can be added as options
The equipment is prepared to add systems for rejecting faulty parts as well as a system to prepare the bagging and packing.

3. Can be used with all types of solid products
Versatility for any type of solid that needs quality control.

4. Hygienic design
It has a hygienic design that is easy to clean.

Operation

It is a piece of compact and robust equipment, small and easy to assemble/adapt to any production line without modifications or stoppages on the existing line.

Using state of the art precision 3D laser scanning with sophisticated MCR proprietary software, the equipment controls the quality of the products and real production on the line.

Additionally, adding some accessories, you can generate systems of: rejecting, bagging and fitting.

All MCR equipment is manufactured with top quality materials and components as well as certificates for food and chemical processing (AISI 304 or AISI 316) stainless steel, electronic components made by leading manufacturers.

Technical Specifications
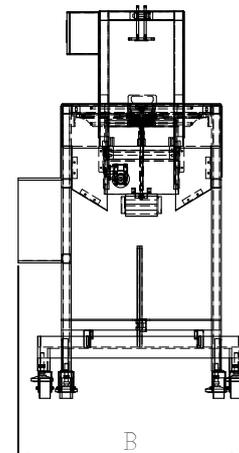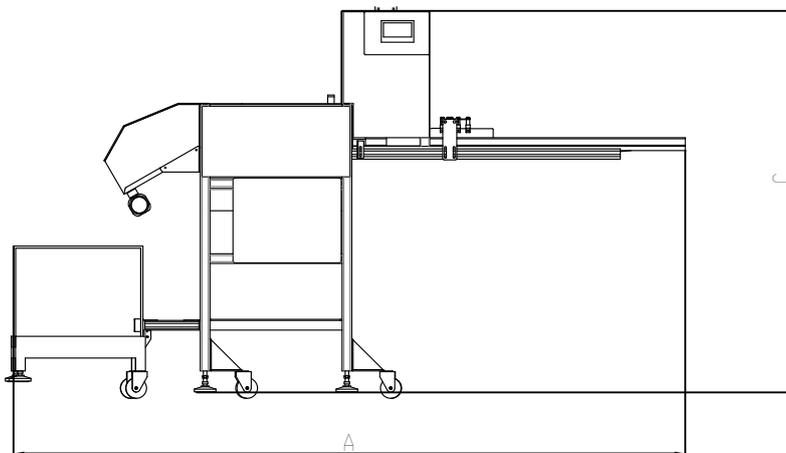
SIQ-C Quality control system by laser

Model	A	B	C	Productivity	Installed elec. power
SIQ-C	3000	950	1700	Customisable	1 kW

Dimensions in mm

Industrial automation is a global trend that is necessary to be more competitive. MCR is qualified to accompany you on this path, to make your company more competitive using Industry 4.0 and the cutting-edge technology of the moment.

Ctra. Molins de Rei, 21-23
08205 Sabadell, Barcelona

(+34) 93 727 71 45

info@mcr.es

www.mcr.es

Visit our website