Infinity Plus

Optical sorter for the production of granular food products

Introducing the Infinity Plus

The revolutionary new line of optical color sorters, engineered with cutting-edge artificial vision technology to redefine the standards of precision and color selection.

Excellence is in the details

Our advanced sorting process utilizes gravity to gently guide products down a chute where they undergo inspection by a series of digital cameras that are able to recognize any defect in the product. Detected imperfections are then removed using a targeted, high velocity air ejection system, diverting them to the dedicated waste collection area, guaranteeing consistent product conformity.

Precision color and dimensional sorting

The Infinity Plus optical sorters employ advanced full-color, trichromatic technology, featuring high-resolution digital cameras capable of distinguishing between 16 million colors and detecting imperfections down to 0.09 mm.

This system replicates the human eye's ability to discern subtle color variations and integrates dimensional analysis — cross-referencing size and color — to achieve exceptional sorting accuracy. This dual-assessment approach minimizes processing waste and maximizes yield, consistently delivering a final product of superior quality.

Technical data

	Leght (mm)	Depth (mm)	Height (mm)	Weight (kg)	Air Consumption (l/s)	Energy Consumption (kW)
Infinity 1 Plus	940	1790	1840	460	5	0,5
Infinity 2 Plus	1280	1790	1840	710	10	0,9
Infinity 3 Plus	1620	1790	1840	800	15	1,3
Infinity 4 Plus	1960	1790	1840	1020	20	1,7
Infinity 5 Plus	2300	1790	1840	1200	25	2,1
Infinity 6 Plus	2640	1790	1840	1300	30	2,5
Infinity 8 Plus	3320	1790	1840	1550	40	3,3

Ensuring Safety in Granular Food Production

Our inspection systems are engineered to ensure the absolute safety and quality of powders and granulate food products such as instant meals, salt, sugar and flours. By rigorously monitoring outgoing goods, we eliminate foreign contaminants — metal, glass, stone — and minimize other quality deviations. From detecting minute stainless steel wire in bouillon cubes to removing copper chips from 110 lb. flour bags, our technology guarantees compliance with stringent industry standards like IFS, BRC, TESCO. Integrating our solutions into incoming goods and production processes delivers significant cost reductions and enhanced operational reliability — for example, by checking raw materials before grinding or protecting molding and filling machinery.

Customized Solutions for Our Customers

Increasingly, customers require comprehensive solutions that seamlessly integrate with their production lines. We are able to provide optical sorters equipped with all necessary accessories for loading and unloading products, along with complementary machinery for selection and cleaning, such as screens, cleaners, densimetric tables, elevators for loading and unloading, and pneumatic transport systems.

A cutting edge solution

In addition to high-capacity hardware, our optical sorters feature software designed by our experts, able to work in complete autonomy thanks to an easy-to-use user interface. Using a resistive touch screen, the customer can set the selection criteria using two main functions:

"Blob" function: facilitates discardment of defective product parts when an imperfection exceeds a certain size (analyzed in adjustable pixel count), increasing operation flexibility and reducting false rejects

"CS" function: splits products according to their size, distinguishing between "compliant product" and "waste"

Users can manage selection manually, through RGB adjustment, or automatically, through the "Capture" function carried out by the sorter itself. Additionally, a cloud containing more than 10,000 digital product acquisitions is available to Mesutronic customers, enabling users to independently create and store their own processing "recipes", determinig which parts of the product to discard or keep.

Effortless control, seamless connectivity

Mesutronic's optical sorters are designed for simple integration with Programmable Logic Controllers (PLCs) via OPC and OPC UA standards, enabling constant process supervision and remote support through Wi-Fi connectivity. Product flow probes allow operators to manage inspection phases remotely, using either a PLC or a smartphone/tablet for convenient control.

The integrated OPC Unified Architecture (UA) facilitates data exchange between PLCs, human-machine interfaces, and other machinery. UA, a key component of the industry 4.0 plan, provides valuable insights into sorter operation, including real-time performance monitoring, downtime tracking, and waste data analysis. This data-driven approach streamlines reporting, enhances supply chain transparency, and optimizes production processes.

No compromises, always there for you

Throughout the entire life cycle of the inspection system — from project planning to commissioning, the productive phase, and even when faults occur — an agile, professional, and attentive service team plays a crucial role in ensuring its effectiveness. At Mesutronic, the customer is at the heart of everything we do. It starts with a system concept that prioritizes functionality and reliability, and continues with after-sales service that provides fast, dependable support that comes as a standard. Our training program is tailored to your needs, enhancing the competence of personnel at every level who interact with our systems.

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