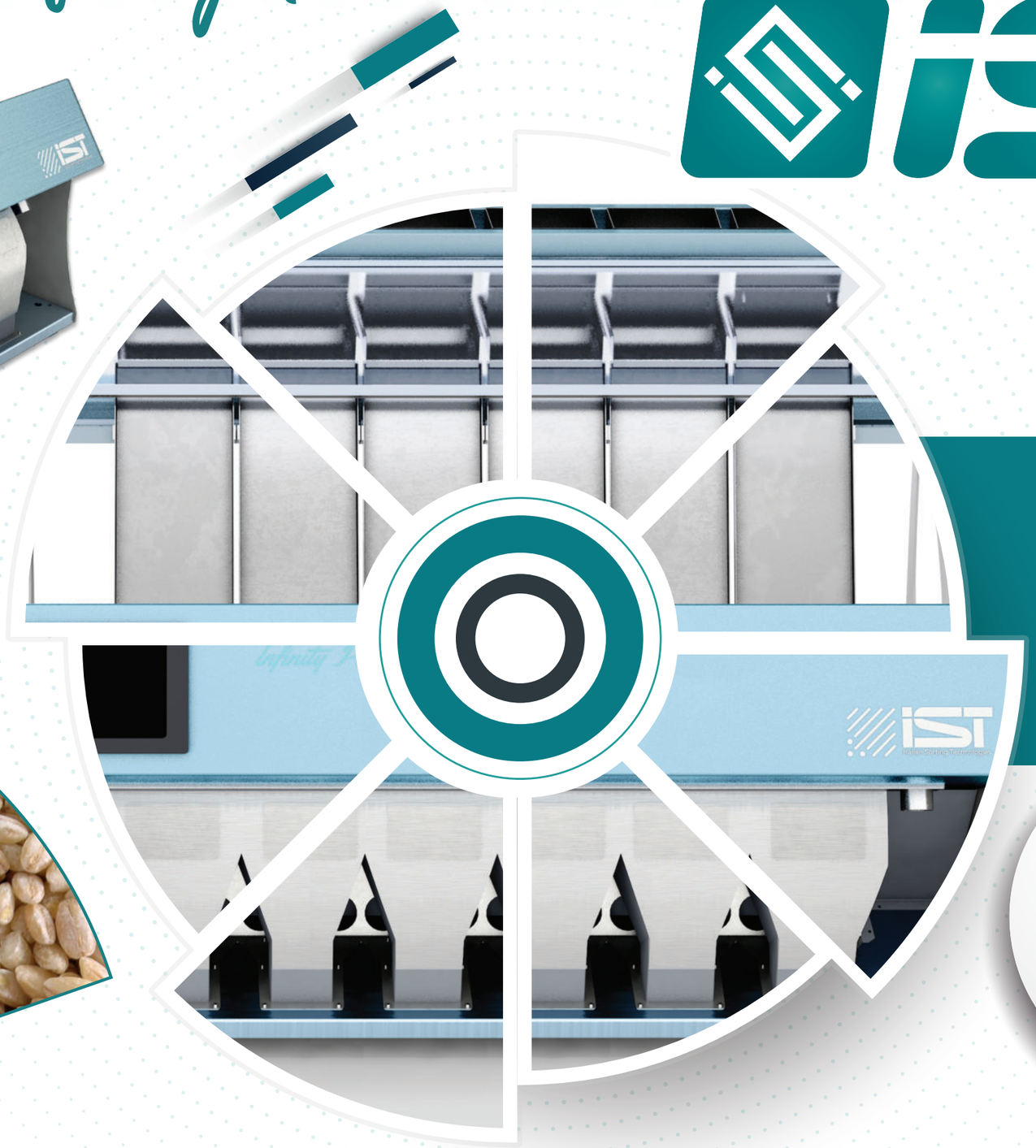
Infinity Plus



Color Sorting Machines

new SERIES INFINITY Plus

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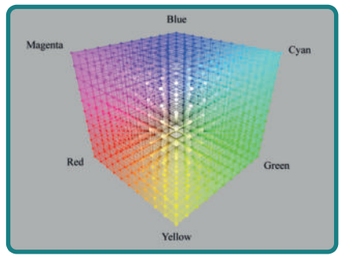
proudly made in Italy

NEW INFINITY PLUS COLOR SORTER

A new range of optical sorting machines produced by I.S.T.: it is the most advanced optical sorting machine currently available on the market. With FULL COLOR technology, all defects in the product to be inspected are detected using high-resolution digital cameras that are able to distinguish up to 16 million colours, just like the human eye.

An **internally developed** software intended to allow the operator to manage programs in a fully autonomous way. A **self-learning** system can be used to set up a program within just a few minutes, which automatically captures images of compliant products and all defects to be discarded.



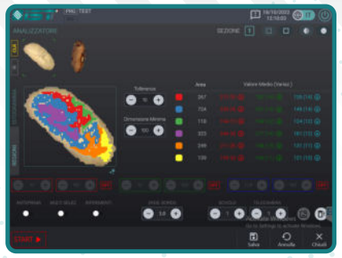
Remote assistance, for creating or modifying programs, to provide assistance remotely and in real time.

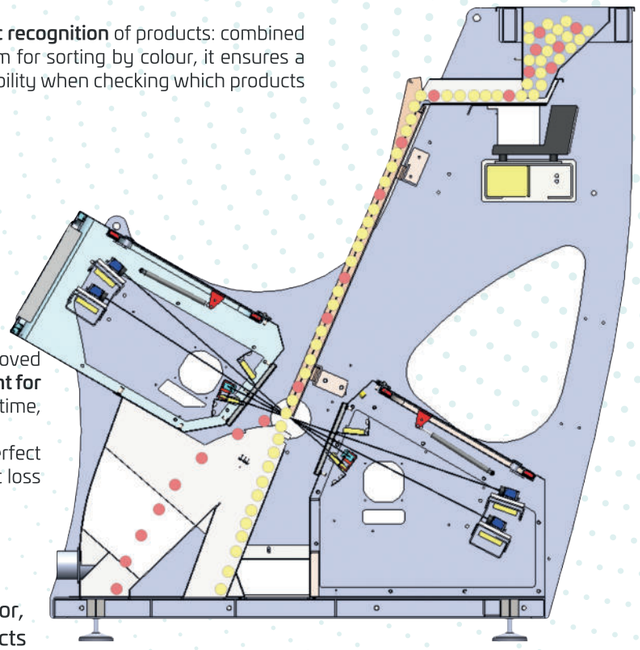
An ejection system equipped with **Smart-Delay** technology, whereby the ejectors are dynamically activated depending on which product is to be discarded, for utmost precision during discarding in order to minimise the number of false rejects and avoid losing good products.

A multi-spectral vision system allows different wavelengths to be used at the same time to achieve the best possible results:

- **High-resolution RGB cameras** with **FULL COLOR** technology can distinguish up to 16 million colours and recognise defects as small as 0.09 mm.
- **SWIR (Short-wave Infrared)** cameras with an InGaAs sensor forrecognising and separating products with defects that cannot be visually distinguished, such as shells and dried fruit, or even in the plastics industry for sorting different types of polymers.
- **NIR (near infrared) cameras** with IR sensor, for detecting stones, soil, glass, and other foreign bodies.

Size and geometric recognition of products: combined with a vision system for sorting by colour, it ensures a high degree of flexibility when checking which products to discard.

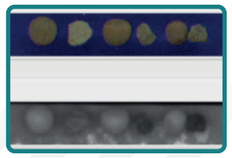




Vibrating plates with front drop by gravity, for improved incoming product control. **Chutes with an anodising treatment for use in the food industry** for preventing wear and tear over time, designed to ensure a constant flow over the entire surface.
A proprietary uniform **LED lighting system** offering a perfect comprehensive view of the products to be inspected, without loss of quality and without overheating.

SWIR CAMERA

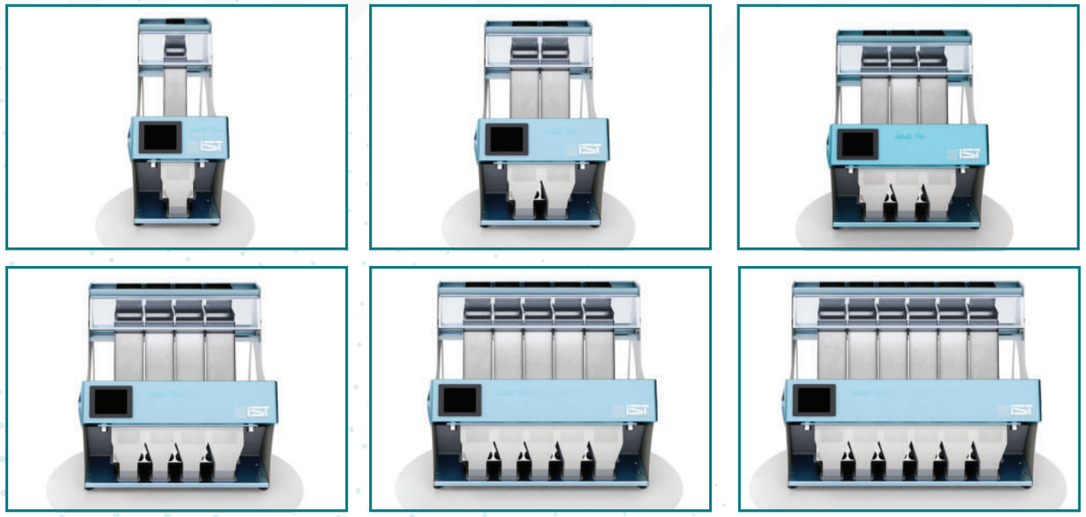
SWIR (Short-wave InfraRed) cameras, with an InGaAs sensor, recognise and separate products with defects that cannot be visually distinguished, such as shells and dried fruit, barley and wheat, and hulled and unhulled grains. Different types of plastic polymers can also be recognised and separated so that the materials can be properly recycled.



NIR CAMERA

In the case of food products, this technology increases safety considerably by using cameras and NIR (Nir infrared) lighting to recognise stones, foreign bodies, and product alterations.

Our models



Technical Specification

	Width	Depth	Height	Weight	Air Consumption	Energetic Consumption
	mm	mm	mm	kg	l/s	kw
Infinity 1 Plus	940	1800	1850	460	8	2,3
Infinity 2 Plus	1300	1800	1850	710	16	2,8
Infinity 3 Plus	1650	1800	1850	800	24	3,5
Infinity 4 Plus	1980	1800	1850	1020	32	4,2
Infinity 5 Plus	2350	1800	1850	1200	40	4,6
Infinity 6 Plus	2700	1800	1850	1300	48	4,9

Functioning