

**OPTICAL SORTING** 



# You & 107+



The Cimbria **SEA.IQ PLUS** Optical Sorter uses the most advanced technology to sort with unmatched precision, separating micro sized foreign bodies, and defects of products that cannot be distinguished by human eyes. The all-new optical system features a set of cameras with integrated RGB, NIR, and SWIR or UV, working in multifrequencies tens of thousands of scans taken per second and matched against



the data collected and analyzed. The result is an exceptional sorting performance which is achieved even on standard configurations.

No matter what your business is, Cimbria is the expert at your side to ensure you win the game in the most challenging applications.



# You & Quality



#### **SETTING THE SORTING PARAMETERS**

SEA.IQ PLUS has been designed to recognize all defects and imperfections. Gathered by the ideal combination of vision systems (RGB+NIR with SWIR, InGaAS, UV) applied to the sorter, the information is filtered by the program to allow comparison with the parameters established by the operator. Thus, was born the formula that allows the ideal selection to the needs of the case.

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#### **SETTING THE SHAPE**

SEA.IQ PLUS ensures the detection of the most imperceptible thinnest colour shades even the tiniest of differences on the smallest of surfaces. The separation of elements based on their geometry is possible thanks to the shape sizing integrated function.



#### **SEE BEYOND VISIBLE**

SEA.IQ PLUS is equipped with multifrequency infrared technology that allows perfect recognition of distinguishable contaminating objects thanks to their diversity of matter.











# You & Experience



# The Best User Experience with the New HMI.

Simplified screens, increased visibility and improved graphics make it easy for the user to set dedicated programs. By using a password, you can easily create efficient programs, or retrieve data remotely to optimize performances. The customizable home screen makes sure your machine is set for the way you operate.





# You & Performance



## THE ARTIFICIAL INTELLIGENCE FOR OPTICAL SORTING

BRAIN<sup>™</sup> is the AI powered software taking accuracy and efficiency to a new level. With BRAIN<sup>™</sup>, you can create the most complex recipes in a flash. So, you can achieve your highest sorting performance.

#### WHAT BRAIN CAN DO FOR YOU

- Unmatched Sorting Accuracy
   Revolutionize precision with BRAIN™'s advanced Al algorithms for unparalleled sorting accuracy.
- Enhanced Efficiency
   Boost productivity with BRAIN™'s high-speed parameters setting, minimizing human trials
- Cost and time saving
   Achieve significant cost and time reductions by avoiding manual errors and optimizing sorting operations.
- Ongoing Support
   Count on our dedicated support team for continuous assistance and future-proof upgrades.

**EXTREME PERFORMANCE. MADE EASY.** 



### Smart Design.

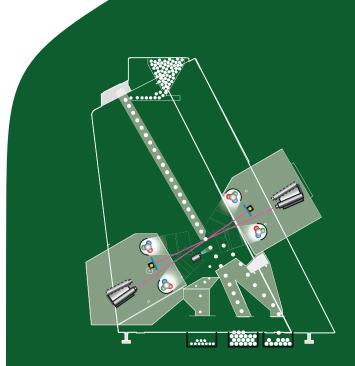
- Load-bearing structure to support additional loading hoppers
- Dust-proof pressurization system protects the strategic parts of the electronic and optical system
- Cameras heat reduction system keeps constant the perfect operational temperature
- Standard colour RAL 9003.
   Optional colours upon request
- Stainless-Steel version upon request
- Automatic and adjustable cleaning cycles keeps the vision conditions of the inspection system at their best
- All mechanics were developed to allow very easy maintenance

#### Put Us to the Test.

Send us your toughest sorting challenge. Cimbria's multiple testing centers are available for customizable lab trials worldwide. Let our experts recommend the best solution.



SCAN THE QR CODE TO SET UP YOUR TRIAL



## Configurations.

- Standard configuration:
   RGB full-colour camera with integrated double-frequency NIR
- Optional configuration: Multiple vision packages SWIR/ INGAAS and UV to combine to the entry model with fullcolour RGB+ double-frequency NIR
- From 1 to 6 chutes with split options
- From 63 to 96 ejectors per chute depending on the application
- Display 21,5 inches, windows 10 IOT
- Available configurations for multiple passes and reverse sorting

## **Maximum Flexibility.**



SEA.IQ PLUS can be configured to meet your exact needs. Multiple feeding chute configurations provide maximum versatility, while the smooth flow reduces breakage. The versatile chute reverse function allows you to operate a variety of products within the same system.

Our global team of experts is available for support at every step.

#### **MACHINE TECHNICAL DATA**

MACHINE FEGINICAL DATA									
				1	2	3	4	5	6
Dimensions	Length	mm / inch		1550 / 59,45	1550 / 59,45	2220 / 87,40	2220 / 87,40	2900 / 114	2900 / 114
	Width	mm/inch		1887 / 74,29					
	Height	mm / inch		2090 / 82,28					
Weight			kg	970	1050	1220	1500	1520	1600
			lbs	2138	2315	2690	3307	3351	3527
Compressed air consumption (max value at 6 bar)   I/min m³/h			l/min	320	640	960	1280	1600	1920
			m³/h	19	38	58	77	96	115
Power supply/frequency V/Hz			230V - 50/60 Hz						
Power absorption (A) Power consumption (Kw)  5 mm pitch (max. value) 3.3 mm pitch (max. value)		A - Kw	4 - 0.9	5.9 - 1.3	9.8 - 2,1	11.7 - 2.5	14.6 - 3.2	16.5 - 3.6	
		pitch	A - Kw	4.3 - 1	6.6 - 1.5	10.9 - 2.3	13.1 - 2.8	16.4 - 3.6	18.7 - 4

#### **CERTIFICATIONS**

- · CE conformity certificate
- · 2006/42/CE on machinery safety
- · 2014/30/CE on Electromagnetic Compatibility
- · Compliant with UL and CSA
- · Food-grade MOCA version available as option
- · ATEX standards Certificate available as option



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