SEA.CX

OPTICAL SORTING

CIMBRIA

An expert
at your side.

Global Pioneer
in Optical Sorting.

To find the right optical sorter for your business, you need a partner you can rely on. One who understands your biggest sorting challenge, allows you to **put their solutions to the test** and offers **expert advice**. You need **support at every stage** of the selection of the solution, installation and after-sales process.

Cimbria has been helping customers succeed for more than 75 years. With a wide range of technologically advanced and user-friendly optical sorters to sort seeds, grains, food commodities and industrial products, you can feel confident you will get **the right system tailored to your business**.

Much More Than Full Colour.

Previously known as Chromex, the **SEA.CX** Optical Sorter uses advanced technology to see beyond the human eye and recognize a wide range of defects.
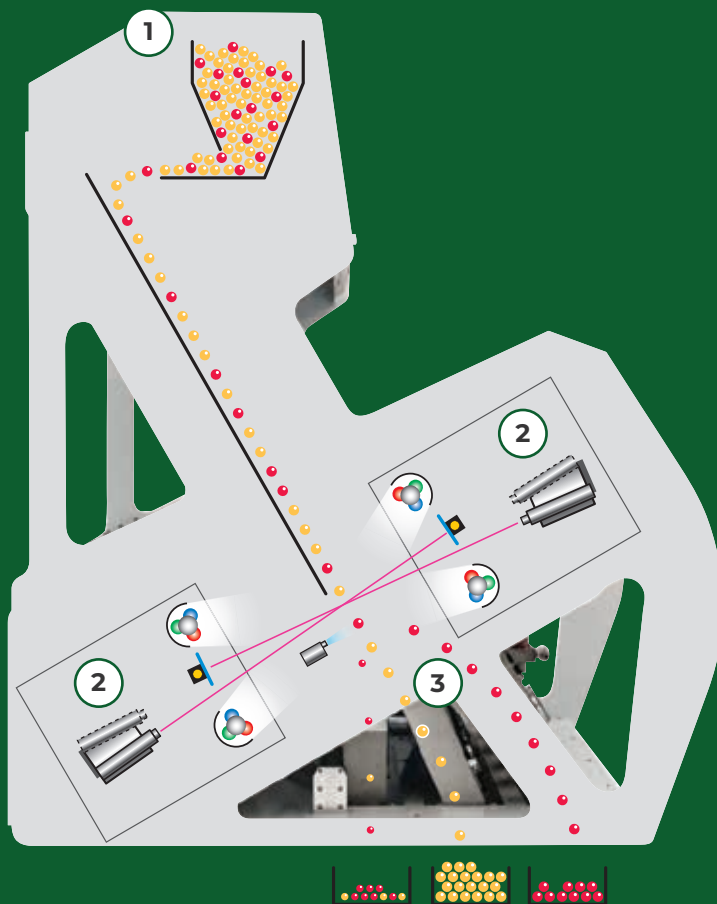
Using **RGB full-colour cameras, NIR cameras to optimize the separation of foreign bodies, and InGaAs technology to separate defects that are not visible**, SEA.CX helps you improve production efficiency and quality.

SEA.CX provides the **highest level of safety in terms of performance and reliability** even in the standard version.

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The vision system.

- **SEA.CX** guarantees exceptional results in identifying colors and shades. The cameras are equipped with Full-color RGB technology and are able to recognize 16 million colors with a resolution of 0.06 mm, making 18,000 scans per second.

- To optimize sorting performance, optional cameras are available with **technology to see beyond the visible spectrum and separate foreign bodies with colors very close**

to compliant products and other imperfections invisible to the human eye. This includes mycotoxins and fungi, as well as other contaminants, like **stones, wood, shells, plastics and glass**.

- The combination of the Full Color RGB technology with additional IR, InGaAs and UV sensors makes SEA.CX one of the most equipped Optical Sorters in the Cimbria range.

1. In-feed system
2. Vision system
3. Ejection system

Characteristics.

01. IN-FEED SYSTEM
- The in-feed system ensures ideal product upload
- From 0.5 to 7 chutes to satisfy any production capacity requirement

02. VISION SYSTEM
- The full-colour RGB cameras are equipped with a shape and damaged area sizing function. This is integrated and allows elements to be separated based on geometric characteristics. Size can also be controlled so you can determine if an individual piece within a product should be accepted
- The NIR, InGaAs, UV technologies make it possible to remove invisible defects such as mycotoxins, fungi as well as other contaminants like stones, wood, shells, plastic and glass
- The HSI imaging system compares the object to your defined thresholds to identify it as a real defect or an acceptable element, recognizing up to 14 families of defects

03. EJECTING SYSTEM
- Rapid firing ejectors guarantee precise expulsion and highly concentrated rejects
- In automatic re-sort version, the accepted or rejected product can be conveyed to another section to undergo multiple passes of the sorting process
- The accurate sorting process ensures food safety and added-value. Highly concentrated rejects preserve profitability.

04. ELECTRONICS
- Self-diagnosis and self-calibration functionality maintains consistent performance
- Electronic boards using SMF and FBGS technology are easy to replace

05. STRUCTURE
- Exclusive LED lighting. Optimal lighting with low heat for reliable and long-lasting performance
- Dust-proof and airtight
- Cameras heat reduction system to maintain the ideal temperature inside the optical box
- Tilting optical boxes simplify cleaning and maintenance
- Standard colour RAL 9003. Customized colours upon request

SCAN THE QR TO SET UP YOUR TRIAL

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.

Grains

Seeds

Food

Recycling

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Fast, Intuitive, Connected. Exagon™ HMI.

Simplified screens, increased visibility and improved graphics makes it easy to control set **dedicated programs**.

Quickly create efficient programs using your password to retrieve data remotely and optimize performance. The customizable home screen ensures **your machine is set for the way you operate**. The same programs can be uploaded to multiple machines with a single database.

Thanks to OPC protocols, SEA.CX can be connected to your company's network and remote assistance for real-time information exchange and solutions compliant **with the most modern industrial processes**.

Service first.

Cimbria and its authorized local partners offer exclusive and **qualified after-sales service**. This includes spare parts, regular maintenance and plant check-ups.

SEA.CX is supplied and installed by Cimbria's highly-skilled technical staff, who you can rely on for in-person training, remote assistance and annual maintenance services.

Cimbria, an expert at your side.

CERTIFICATIONS

- CE conformity certificate
- 2006/42/CE on machinery safety
- 2014/30/CE on Electromagnetic Compatibility
- Compatible with UL and CSA standards
- ATEX standards Certificate (option)

MACHINE TECHNICAL DATA

			0.5	1	1.5	2	3	4	5	6	7
Dimensions	Length	mm - inch	935 - 36,81	935 - 36,81	935 - 36,81	1510 - 59,44	1510 - 59,44	1915- 75,39	1915 - 75,39	2465 - 97,04	2465 - 97,04
	Width	mm - inch	1690 - 66.53								
	Height	mm - inch	2100 - 82.67								
Weight		Kg - lbs	700 - 1543	750 - 1653	800 - 1764	1000 - 2205	1060 - 2337	1250 - 2756	1300 - 2866	1600 - 3527	1650 - 3638
No. of vibrating feeders / chutes			1	1	1.5	2	3	4	5	6	7
No. of cameras (front+back)			2	2 - 4	2 - 4	4 - 8	6 - 12	8 - 16	10 - 20	12 - 24	14 - 28
No. ejectors / chutes			27	54	77	108	162	216	270	324	378
Compressed air consumption (max value at 6 bar)		l/min - m³/h	150 - 9	300 - 18	450 - 27	600 - 36	900 - 54	1200 - 72	1500 - 90	1800 - 108	2100 - 126
Power supply / Frequency		V/Hz	230 / 50 - 1 Ph (L + N + PE)								
Power absorption - Power consumption (max. value)		A - Kw	3.1 - 0.8	3.1 - 0.8	3.1 - 0.8	6.4 - 1.5	6.4 - 1.5	9.7 - 2.3	9.7 - 2.3	11.8 - 2.7	11.8 - 2.7

PLEASE DOWNLOAD THE DATA SHEET FOR MORE TECHNICAL INFORMATION

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Cimbria.com

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