



SEA.TR

OPTICAL SORTING





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.

Always a Step Ahead.

Previously known as Truer, SEA.TR is the Cimbria's optical sorter featuring the advanced multispectral vision system made by RGB full-colour and infrared technologies. SEA.TR determines and separates even the smallest colour and shade differences from almost any bulk commodity, to meet even the strictest food hygienic and healthy requirements of end-products. Ideal for almost any commodity, SEA.TR can combine the Full-Color vision system with the NIR and InGaAs technologies, to sort precisely what you want to ensure precise sorting in any application needed.



Key Features.

PRODUCTION CAPACITY

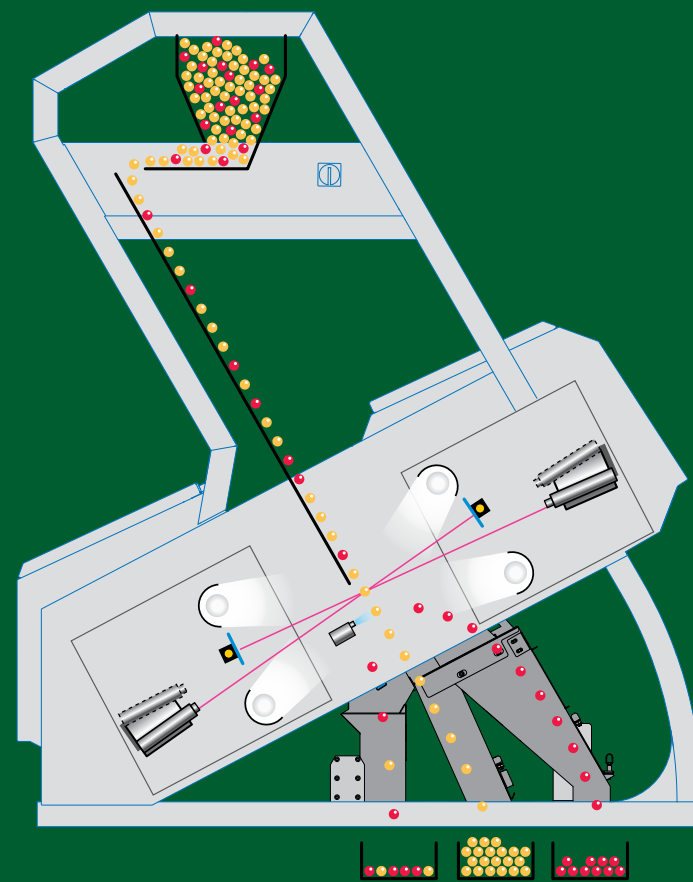
- SEA.TR can be divided in up to 4 different sections working independently
- Reversible chutes with smooth and channeled surfaces
- Ultra rapid firing ejectors, producing high concentrate rejects

ELECTRONICS

- The SEA.TR hardware is organized in easily replaceable electronic boards
- Self-control functions, such as self diagnosis and self-calibration keep consistent sorting performances
- Several custom-made sorting recipes can be stored on board
- Software backup possible through USB port

MECHANICAL DESIGN

- Pressurized and conditioned optical boxes prevent dust entering
- An airtight structure prevents dust and product outflow
- Easy product collection and sampling
- Tilting optical boxes for proper cleaning and maintenance
- Pre-arrangement for additional aspiration system



SEA.TR is available in RAL 9003, customized colours upon request.

Stainless steel versions available.

Settings.

FULL-COLOUR RGB SMART CAMERAS

- Full-colour RGB smart cameras with 0.06 mm optical resolution
- By means of photographic acquisition, the sorter image processing system compares the object to user-defined accept or reject elements
- The vision system can convert the RGB values into an HSI colour space to “see” the products like the human eye

NIR AND INGAAS CAMERAS

- According to the sorting target, SEA.TR can be equipped with additional NIR and/or InGaAs cameras, to better perform in the infrared area
- The NIR cameras optimize the separation of foreign bodies having a similar colour of the conforming product, such as stones, sticks, glass and plastic
- The InGaAs technology allows the separation of defects which cannot be visually distinguished, such as the separation of hulled and unhulled grains or shells out of nut kernels



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.



Food



Grains



Seeds



Recycling



Our services.

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. Cimbria does just that.









To support you at every stage of the selection, installation, and after-sales process and to ensure that your sorter is truly tailored to your needs, our dedicated global team gives you the opportunity to test the effectiveness of our solutions, with full-service centres. Our highly skilled technical staff will give you support in every step of the way, with trainings, in person and remote assistance and dedicated annual maintenance services. You can rely on Cimbria, a true partner 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)

Connectivity and user-friendly HMI.

The system analyzes the images detected by the RGB system almost as effectively as the human eye. The image processing system by photographic acquisition compares the object to user-defined accept or reject thresholds in order to identify it as a genuine defect or as an accepted element. The HMI software allows the user to set the defect size and can categorize them by specific categories. Windows 10 graphic interface assures easy connection to company networks and to remote assistance systems.

MACHINE TECHNICAL DATA

		1	1,5	2	3	4	5	6	7	
										
No. of vibrating feeders/chutes		1	1.5	2	3	4	5	6	7	
No. of cameras (front+back)		2-4	2-4	4-8	6-12	8-16	10-20	12-24	14-28	
No. ejectors/chutes		54	77	108	162	216	270	324	378	
Compressed air consumption (max value at 6 bar)	l/min	300	450	600	900	1200	1500	1800	2100	
	m³/h	18	27	36	54	72	90	108	126	
Compressed air hose	Ø	1"								
Power supply/ frequency	V/Hz	230/50 - 1 Ph (L + N + PE)								
Power consumption (max. value)	kVA	0.7	0.7	1.4	1.4	2	2	2.4	2.4	
Power absorption (max. value)	A	2.9	2.9	5.8	5.8	8.7	8.7	10.5	10.5	
Dimensions	Length	mm / inch	1093 / 43,03	1093 / 43,03	1700 / 66,93	1700 / 66,93	2125 / 83,66	2125 / 83,66	2675 / 105,32	2675 / 105,32
	Width	mm / inch	1690 / 66,54							
	Height	mm / inch	2100 / 82,68							
Weight	kg	700	750	950	1000	1150	1200	1400	1450	
	lbs	1544	1654	2095	2205	2536	2646	3086	3197	



PLEASE DOWNLOAD THE DATA SHEET FOR MORE TECHNICAL INFORMATION.



A/S CIMBRIA

Faartoftvej 22
7700 Thisted
DENMARK
Phone: +45 96 17 90 00
cimbria.holding@agcocorp.com
www.cimbria.com

CIMBRIA S.R.L.

Via Colombarotto 2
40026 Imola BO
ITALY
Phone: +39 0542 361423
seainfo@agcocorp.com
www.cimbria.com

Follow us   