

SEA CHROMEX COLOR SORTER



PROCESS

- 1 In-feed hopper
 - 2 Vibrating plate
 - 3 Feeding chute
 - 4 Inspection system (ultimate 4096 pixels Full-Color RGB cameras, front & back, for the standard version)
 - 5 LED lighting system
 - 6 Ejectors
 - 7 Selected product
 - 8 Reject
- Up to 4 sections for simultaneous resorting
 - Available in configuration with re-sorting, re-resorting or reverse sorting.



TECHNICAL CHARACTERISTICS:

EXAGON USER INTERFACE

- 15" color touch screen with capacitive feature for perfect visibility in low light conditions
- Intuitive graphics and multilingual interface
- It allows to directly control the product through its images and modify the recipes in an easy and fast way

- EXAGON main information and functions:



- Machine status (vibrators and sensitivity on/off per section) through its synoptic
- Recipes (up to 200 stored in the machine)
- Level sensor (product control inside the hopper)
- Real-time statistics (e.g. number of rejects per second or per family defects, etc.)
- Alarms and smart explanation for the restoration of the machine function in case of anomalies
- Total and partial hour counter

OPTICAL SYSTEM

- Ultimate 4096 pixels Full-Color RGB cameras (front & back), for the standard version. The system works in the visible spectrum looking almost like the human eye
- Additional NIR and/or InGaAs cameras
- Scan rate: up to 20.000 scan./s
- Optical resolution: 0,06 mm
- The software can control 16 families of defects
- Shape-sizing integrated in the system
- Defect size control and adjustment
- LED lighting and active background

EXPULSION SYSTEM

- N.54 Ejectors per chute
- Ejectors working speed up to 1.000 cycles/s, guaranteed up to 2 billion cycles

ELECTRICAL SYSTEM

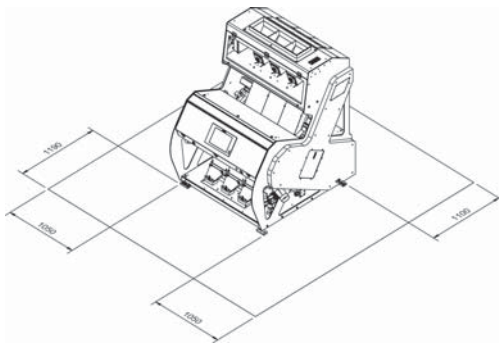
- Organized in electronic boards of easy substitution and of latest technology
- Self-control functions (self-diagnosis and self-calibration) guarantee excellent operational stability
- Ethernet connection allows real-time monitoring and web-based remote assistance

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MECHANICS

- Available from 0.5 to 7 chutes
- Reversible chutes with one smooth side and one with grooves of two different types depending on the product to be selected
- Tilting optical boxes simplify cleaning and maintenance, while pressurization and the airtight structure prevent dust entering
- Automatic cleaning system
- The cooling system grants the ideal temperature inside the optical boxes
- Pre-arrangement for the aspiration system connection

Leave at least 1 meter of free space around the machine.
Keep the machine far from direct and strong light sources.



TECHNICAL DATA

- Standard color: white RAL 9010
- Working environment temperature: between +3°C and +35°C
- Liquid impermeability and dust protection IP 55
- CE conformity certification
- 2006/42/CE on machinery safety
- 2014/30/CE on Electromagnetic Compatibility
- Compatibility with UL and CSA standards
- Compatibility with ATEX standards (on demand)

POSSIBLE OPTICAL CONFIGURATIONS

Front			Back		
T		+	T		Standard version. n.2 RGB Full-Color cameras/chute (front&back)
T		+	T	N	n.2 RGB Full-Color cameras per chute (front&back) + n.1 additional NIR camera/chute back-side
T	N	+	T	N	n.2 RGB Full-Color cameras per chute (front&back) + n.2 additional NIR camera/chute (front&back)
T		+	T	R	n.2 RGB Full-Color cameras per chute (front&back) + n.1 additional InGaAs camera/chute front-side
T	R	+	T	R	n.2 RGB Full-Color cameras per chute (front&back) + n.2 additional InGaAs camera/chute (front&back)
T	N	+	T	R	n.2 RGB Full-Color cameras per chute (front&back) + n.1 additional NIR camera/chute front-side + n.1 additional InGaAs camera/chute back-side

Legend: T = RGB Full-Color camera, N = NIR camera, R = InGaAs camera

EXTERNAL EQUIPMENT REQUIRED FOR THE SORTER OPERATION:

- For the correct operation, the user must provide and install:
- 230 V - 50 Hz power supply
 - Proper voltage stabilizer (strictly necessary)
 - Pneumatic system including: rotary compressor, tank, dehumidifier class ISO 8573-1:2010 [5:3:3] ANSI/ISA-7.0.01-1996 with dew temperature -20°C (-4°F) (strictly necessary)
 - 1" minimum diameter air supply tube
 - Support frame of the machine
 - Additional loading and unloading hoppers
 - Product conveyors systems
 - Fast internet connection

	CHROMEX 0.5	CHROMEX 1	CHROMEX 1.5	CHROMEX 2	CHROMEX 3	CHROMEX 4	CHROMEX 5	CHROMEX 6	CHROMEX 7	
No. of vibrating plates/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/s	4.2	8.4	12.6	16.8	25.2	33.6	42.0	50.4	58.8	
Compressed air connection	1"									
Power supply/frequency V/Hz	230 / 50 - 1 Ph (L + N + PE)									
Power consumption (max. value) kVA	1.5	1.5	1.5	1.5	1.5	2.5	2.5	3.5	3.5	
Power absorption (max. value) A	7	7	7	7	7	12	12	16	16	
Dimensions	Length mm	920	920	920	1510	1510	1920	1920	2470	2470
	Width mm	1690	1690	1690	1690	1690	1690	1690	1690	1690
	Height mm	2100	2100	2100	2100	2100	2100	2100	2100	2100
Weight kg	620	750	800	1000	1060	1250	1300	1600	1650	