# **PRODUCTS SEPARATION**



**WASTE** 







**OPTICAL SORTER** 



# ZANIN F.IIi s.r.l.

Viale delle Industrie, 1 31032 Casale sul Sile (TV) - Italy

T. +39 0422 785444 F. +39 0422 785805

www.zanin-italia.com





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**RE-SELLER** 





# **OPTICAL SORTER - SO**

## **UTILIZATION** OPTICAL SORTER

The sliding optical sorter with three-coloured RGB TV cameras of the highest performances available on the market is equipped with a full-colour RGB LED lighting system TV camera. The optical system can also recognise the slightest difference in colour shade. These characteristics reflect the present needs of the food and other processing systems requiring optical sorters capable of recognising and discard products having the same colour, but with slight nuances of tone. The adjustment of the sorter is extremely simplified thanks to the real image setting and allows connection and remote control via internet.

#### **OPERATION** OPTICAL SORTER

Inserted into the loading hopper, the product to be selected coming from the vibrating plate to slide along a chute inclined, the end of which is individually controlled to 360° and in free fall from cameras full-color RGB (trichromatic cameras in standard version) and by additional cameras and InGaAs NIR (option), positioned on the front and back of the channel. Depending on the signals detected by the optical system, the management software controls the pneumatic device that physically divides the product to be rejected from that recognized as "conformant" which, following the fall flow, naturally reaches the discharging hopper. The products to be rejected are deviated by a jet of compressed air emitted by the corresponding and aimed towards the discharging hopper scraps, located on the front of the sorter. In the version with automatic revision, the selected product or discarded is conveyed to another section of the same machine to undergo a process of machining identical.



Seeds selection plant

## MANUFACTURING OPTICAL SORTER

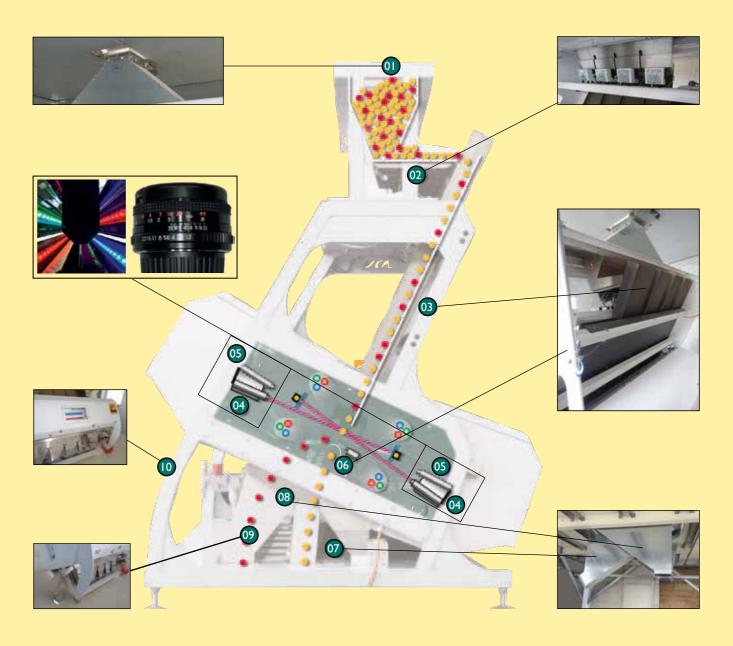
- Pressurised and conditioned optical boxes with cooling system:
- Hermetic and sloping structure to avoid dust heaps and spill outs of the product;
- Receptacles for easy sampling of accepted and discarded products;
- The horizontally pivoted optical boxes allow full opening thus facilitating its cleaning and maintenance;
- The sorters are equipped with standard flanges for connection to the dust removal system;
- Additional arrangement available for the dust suction system directly in the waste collectors (option).







Cereals selection plant



#### **LEGEND**

- 1. Product loading hopper
- 2. Vibrating plate
- 3. Inclined slide
- 4. RGB CCD full-colour TV cameras
- 5. NIR or In Gas possible additional cameras
- 6. Solenoid valves
- 7. Complying product unloading hopper
- 8. Rejected product unloading hopper
- 9. Aspiration

#### 10. Keyboard

**NB:** in the versions with automatic overhaul, the selected or discarded product is conveyed to another section of the same machine to undergo an identical processing.

MODEL		S0 1	SO 1,5	S0 2	S0 3	S0 4	SO 5	SO 6	S0 7
CONFIGURATION									
POWER SUPPLY UNITS		1	2	2	3	4	5	6	7
SLIDES		1	2	2	3	4	5	6	7
CCD CAMERAS *		2 a 4	2 a 4	4 a 8	6 a 12	8 a 16	10 a 20	12 a 24	14 a 28
ELETTROVALVES		54	77	108	162	216	270	324	378
SIZE									
WIDTH	mm	1560	920	1560	1560	1950	1950	2540	2540
DEPTH	mm	1550	1715	1550	1550	1550	1550	1550	1550
HEIGHT	mm	2100	2100	2100	2100	2100	2100	2100	2100
WEIGHT	kg	600	650	700	800	850	950	1100	1200
POWER	kW	1,5	1,5	1,5	1,5	2,5	2,5	3,5	3,5
4 BAR AIR CONSUMPTION		8,4	12,6	16,8	25,2	33,6	42	50,4	58,8
WEIGHT POWER	kg	600 1,5	650 1,5	700 1,5	800 1,5	850 2,5	950 2,5	1100 3,5	1200 3,5

<sup>\*</sup> The number of cameras depends on the configuration. It's possible to configure any model in monochromatic versions, two-color, NIR InGaAs and according to the different needs of selection.