

COLOR SORTERS STATE-OF-THE-ART



Technical description:

- 4 wavelengths multispectral system as standard equipment,**
 RGB and IR in the same 4K sensor.
 This innovative solution allows a completely aligned view. A real improvement detecting defects in similar colored products but with different answers to infrared as foreign bodies, inorganic defects, etc.. Furthermore, it allows a considerable cost reduction compared to the market standard with the use of two different cameras.
- Simultaneous use of RGB, SWIR and IR optical systems:**
 up to 8 frequencies (the standard on the market for these sorters is usually not more than 4 frequencies)
- Flat-spectrum-LEDs** (reproducing the natural sunlight spectrum)
 State-of-the-art full spectrum LEDs, without low light areas typical of the standard white leds. They allow to detect all the slightest color shades.
- State-of-the-art electro-valves at a distance of 3.2 mm**
 with custom design and specification, can reach top values in duration and speed, practically double the number of electro-valves in each chute.
 This to :
 - increase the production speed
 - reduce the quantity of good products wrongly expelled (rejected products are more concentrated)
 - and to allow to reduce the compressed air consumption
- RISE-UP system**
 which allows to move the ejectors closer to the inspection line; halved distance compared to the other sorters on the market. It reduces errors due to different products' fall speeds.
- Multi-wavelengths led with focusing lens,**
 it focuses the light only on the right points and allows high illumination and low consumption.

Furthermore:

- **Automatic air pressure regulator**
- **Automatic control and equalization of the vibrator's speed**
- **Easy programming system**
- **IOT-ready, completely compatible with IOT 4.0**
- **Ramps with silver-ion treatment for better smoothness and hygiene**
- **Integrated remote-service system**
- **Morphological analysis of the product**
- **Width of sorting chute: 307 mm/chute**
- **Resolution of camera: 0.06 mm/pixel**



Model	F1	F2	F3	F4	F8
Chutes	1	2	3	4	8
Ejectors	96	192	288	384	768
Power (kW)	1,4	1,5	1,7	1,8	2,5
Air demand l/sec	9	17	26,3	35,5	64,1