

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	FENIX 1	FENIX 2	FENIX 3	FENIX 4	FENIX 8
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