

THE NEW GENERATION

ECOFLAKE

Optical sorting for shoe sole recycling

PICVISA



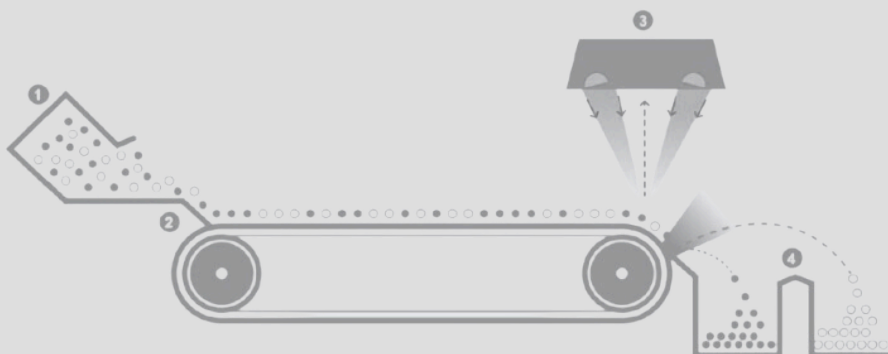
We can sort it out.

www.picvisa.com

ECOFLAKE

Introducing ECOFLAKE: precision optical sorting

The ECOFLAKE optical sorting systems have been designed for demanding sorting applications that require low material loss. They are equipped with high-resolution cameras, state-of-the-art NIR technology, and an innovative belt feeding system, enabling exceptional separation ratios and enhanced stability.



Operation scheme

The material to be sorted is introduced into the receiving hopper (1). Once here, the vibrating feeders uniformly dose it onto the acceleration belt (2), ensuring that all material is transported at the same speed. This unique belt feeding system offers increased stability and blowing precision compared to traditional ramp feeding systems. When the material reaches the inspection point (3), cameras and NIR technology examine it, and corresponding signals are sent to the blowing solenoid valves. The material is then sorted into two fractions, collected in the output hoppers (4).



The LED lighting is fully adjustable in intensity and color, allowing for the optimization of camera vision for each application. The user interface is friendly and simple. Recipe creation is an easy and intuitive process with the help of the built-in touchscreen. Image captures of the material to be sorted can also be saved in a file for remote recipe generation later.

The new ECOFLAKE features include:

| | | | | |
|---|---|---|---|---|
| ✓ Material sorting by color and composition | ✓ High sorting precision (size > 6mm) | ✓ High-definition CMOS RGB cameras with NIR technology | ✓ Sorting of shredded shoe soles | ✓ Touchscreen and intuitive interface |
| ✓ Long-lasting, low-consumption LED lighting | ✓ Remote access and real-time monitoring | ✓ High-speed pneumatic ejectors | ✓ Unique belt feeding system for increased stability and blowing precision | ✓ Easy installation without the need for a raised platform |

Sorting of

- PU
- TPU
- RUBBER
- EVA
- PVC
- LEATHER



Standar equipment:

- Cutting-edge LED lighting with a high color rendering index of CRI90
- VPN internet connection. Secure remote access for supervision, adjustment, and maintenance
- Programmable automatic cleaning.

Optional equipment

- Receiving hopper with automatic level control
- Material recirculation system
- Dust suction and collection
- Solenoid valve auto-test. Checks the valves without operator intervention
- Tropicalization. Climate control for extreme working temperatures

Technical specifications

| ECOFLAKE | X600 | X1200 |
|---------------------------|---------------------------|---------------------------|
| MODULES | 2 | 4 |
| CHANNELS | 128 | 256 |
| RESOLUTION (PX) | 1920 px (RGB) 640(NIR) | 1920 px (RGB) 640(NIR) |
| ACCURACY (%) | 99,5* | 99,5* |
| AIR PRESSURE (BAR) | 6,5 | 6,5 |
| POWER (KW) | 5.85kW | 6.5kW |
| PRODUCTION (TON/H) | 0,4-1,0** | 0,8-2,0** |

*depending on the input material
**Depending on the input bulk density



Design and manufacture of sensor-based sorting equipment incorporating vision and artificial intelligence technologies.



Carrer de Fructuós Gelabert, 6, 7º, 08970
Sant Joan Despí, Barcelona, Spain

+34 938 268 822
info@picvisa.com

www.picvisa.com