





# **Purity is value**

Precisely sort plastic flakes with the FLAKE PURIFIER+

- Reliable detection and sorting of plastic flakes by polymer type, color and metal contaminants for highest purity
- Sorting with high material throughput for higher profitability
- Minimal loss of good material for highest efficiency







## The challenge

Purity is essential to the quality of recycled plastics. This is especially true for food-grade applications, such as bottle-to-bottle recycling processes, in which purity standards are particularly high.

# Multi-sensor sorting systems are an optimal solution with key advantages:

- High material purity to fulfill even the strictest quality requirements
- High material throughput for greater profitability
- Minimal loss of good material for higher efficiency

### Performance characteristics

FLAKE PURIFIER+ is an automated precision sorting system that ensures the highest quality in flake material streams. Other polymer types, false colors, and metal impurities are reliably separated to make the entire recycling process more efficient, precise, and profitable.

### **Efficiency**

- Material throughput rates as high as 3,8 t/h
- Option to integrate recovery system to reduce the loss of good material
- Upgrade sensors at any time





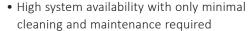
 A single system reliably sorts polymers by type and color while detecting metals and foreign objects



- An improvement over conventional NIR technology, HYPERSPECTRAL imaging allows for simultaneous sorting of multiple foreign plastics
- Minimal loss of good material



• Excellent sorting results, even with poor-quality materials



- Flexible system configuration
- Profitable sorting process



## Three steps to your flexible sorting system:

### **System configuration**

- Working width
- Sensor combination
- Integrated resort-lane
- VISUDESK

### Flexible service-package

- On-site commissioning
- Optional optimization by remote support

**Increased profitability** 

Schedule a non-binding consultation with our experienced sales engineers, or request additional information today.

### Product features

### Polymer type detection (N-sensor)

The hyperspectral Sesotec N-sensor (near infrared) with halogen illumination offers a proven solution for high-end recycling applications such as bottle-to-bottle, tray-to-tray, and other sorting tasks involving food-grade plastics. The highly precise sensor **reliably detects** many different types of foreign plastics: from **labels** (PVC), to **caps** (HDPE, PP), to **PET-family plastics** (e.g. PET-G). This wide range of plastics is simultaneously sorted out from the material flow of valuable materials. The hyperspectral camera is static, meaning the N-sensor will **not accumulate much wear and tear,** helping to save maintenance and repair costs.

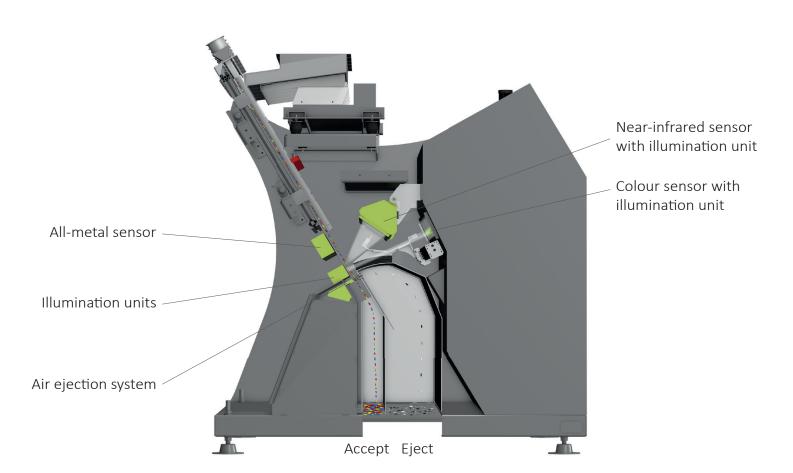
Best of all: the sorting process is highly efficient. The static N-sensor is capable of extremely high scanning rates, **achieving throughput rates of up to 3.8 t/h.** 

#### **Color detection (C-sensor)**

The Sesotec C-sensor achieves color detection by means of a dedicated camera system. This sensor can be adjusted to perform optimally for the sorting task at hand. Innovative LED illumination enables an **economical and reliable sorting process.** It is even possible to detect opaque-white TiO<sub>2</sub>-flakes

### Metal detection (M-sensor)

The Sesotec M-sensor reliably detects even the tiniest **metal contaminants,** regardless of their magnetic properties. Built into this sensor is Sesotec's 40-year history of excellence in metal detection for diverse industries. The M-sensor is **precise, robust, and reliable.** 





### **VISUDESK visualization software**

With optional VISUDESK visualization software, you can see all process and usage data from your Sesotec sorting and metal detection devices in one comprehensive dashboard. This is possible by means of an OPC UA machine communication protocol implemented in each device as well as your company server. The browser-based interface is accessible both on desktop and mobile.

This dashboard provides a comprehensive overview of your entire sorting line as well as information about specific groups of devices, enabling you to quickly create equipment configurations and automate product changes.

Seamless backwards compatibility is possible via established VISUTEC protocols. **Customizable e-mail and text alerts** keep you informed about critical developments in the machine status.

#### **Service**

#### **Remote Access**

Problems on machines can often be remedied via remote access. Sesotec service technicians have direct access to your machines via Ethernet connection and can carry out error analysis, optimization and parameter settings. Many of our devices offer this functionality as standard.

Remote Support with Augmented Reality
Pictures tell more than a thousand words- and in addition to telephone support and remote access, Sesotec also offers video support with augmented reality. For video support, you simply download a free app on smartphone / tablet and send us the access data. Our support center will then guide you through the troubleshooting process step by step until the incident is solved.

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