sesotec

C Color Sensor

M Metal Sensor

N NIR Sensor

MOBILE SORTING PLATFORM

PRE-SORT VCM

Multisensor sorting system for plastic grinding materials on a mobile platform

The complete solution for the use of regrind in plastics processing

In order to be able to sustainably produce and reliably process with foreign material, product purity in the process is the first step. With our mobile multi-sensor sorting platform PRE-SORT, plastics processors have the quality of their regrind in their own hands. The compact complete system efficiently and reliably detects and separates plastic types, colors, and metals from regrinds of various qualities – fully automated and according to the requirements of the production line.

Dedusting

A counterflow classifier system reliably separates dust and fine particles from the ground material.

Material handling

Standard vacuum conveying units with a central vacuum station ensure smooth material transport via the dedusting system to the VARISORT COMPACT. Extraction can be from bins, silos, big bags or even octabins.

Central control

The conveyor technology and sorting are centrally connected via a control unit. The integrated automatic start and stop function ensures the highest possible operating convenience.

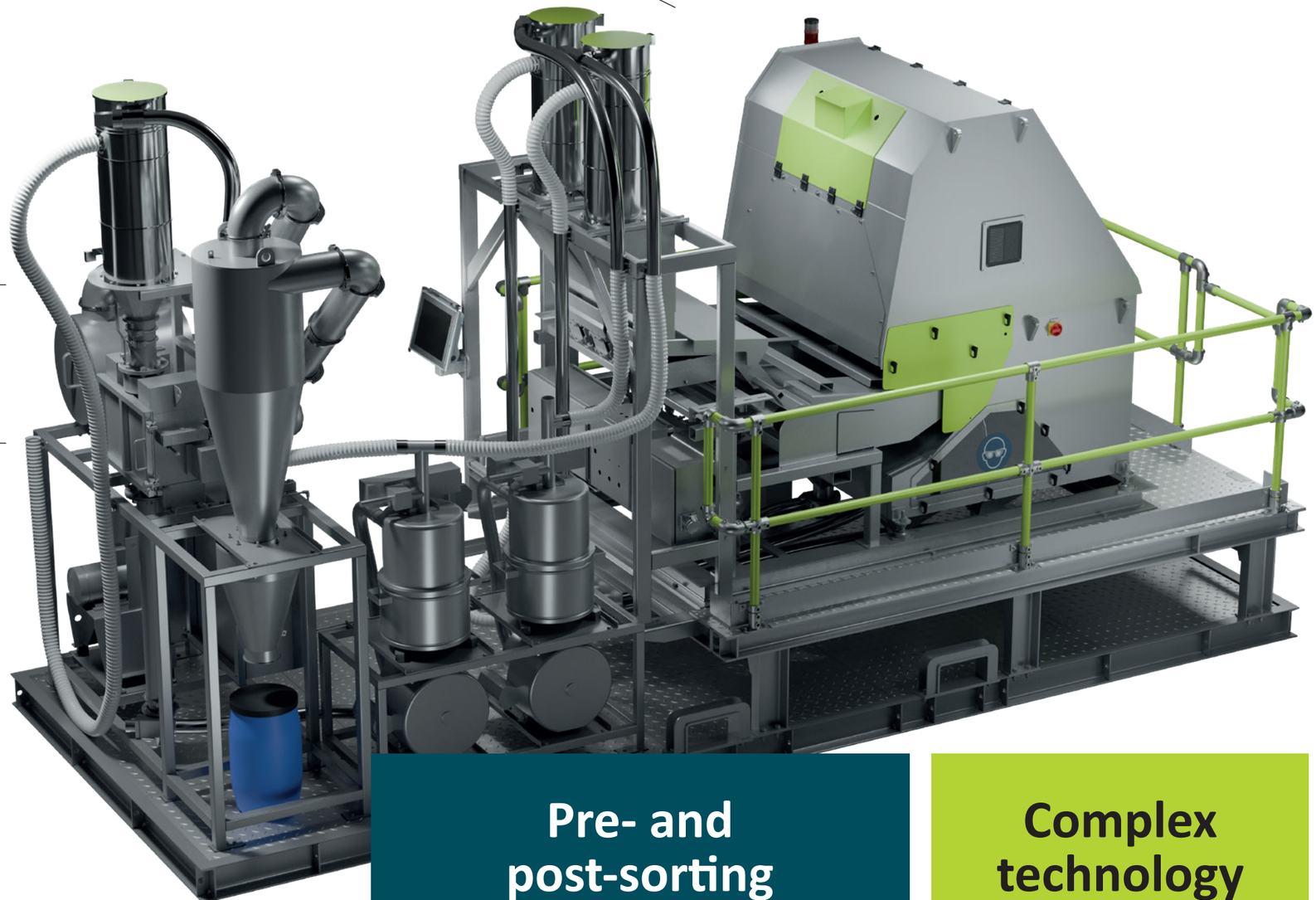
Platform

The structural platform is designed for rapid commissioning of the plant. All the necessary parts, such as material conveying, dedusting, and sorting, are factory-installed and thus ready for use in the shortest possible time.

The core: VARISORT COMPACT

The VARISORT COMPACT multi-sensor sorting system is not only characterized by its extremely compact design. High-resolution sensors, which can be combined in any way, and state-of-the-art signal evaluation technologies guarantee high detection accuracy and an evaluation of up to 500,000 parts per second.

- C – Color & Shape Sensor
- M – Metal Sensor
- N – Near Infrared Sensor



Pre- and post-sorting

combined on one system with all necessary components

Complex technology

conceived with simplicity – made efficiently

Our solution for your production

With our PRE-SORT you have full control over the quality of your input material and make yourself less dependent on external suppliers. Thanks to sensors that can be combined in any way and the possibility of selecting different sorting sequences depending on the material composition, the mobile sorting platform offers full process flexibility. Following the idea of a plug-and-play methodology, the system is ready for immediate use and fits seamlessly into any production environment thanks to its compact design.

Challenges in the purchase of regrind

The plastics processing industry has to face constantly growing demands:

- Rising raw material prices
- Lack of material availability
- Continuously decreasing material quality
- Foreign bodies, foreign colors and foreign plastics in the material
- Complicated supply chains
- Increased delivery times

Our solution

With our innovative concept for material presorting, we help you to produce independently, profitably and highly efficiently. Your advantages:

- High quality and pure material
- Economic production
- Protection against damage to downstream equipment

Your needs for plastics processing

Material efficiency

A first-class quality level of the material to be processed is the be-all and end-all for risk-free further processing in the drying or blending process.

Process reliability

The elimination of dust particles and foreign bodies in the input material prevents machine damage and ensures safe process operations.

Quality assurance

Ensuring the highest quality of end products prevents potential brand damage and expensive recalls.

The right application for every requirement

Due to the free combination of available sensors, you remain absolutely flexible for almost any composition or quality of the input material. The selection of sorting levels is done – quite simply and intuitively – using preconfigured modes. For this purpose, the input material is assigned to three exemplary use cases or classes of presorting:

Class 1

- Nearly homogeneous input material
- Low level of impurities
- Example:
  90 % Good material
  10 % Foreign matter

Class 2

- Heterogeneous input material
- Medium to high degree of contamination
- Example:
  65 % Good material
  35 % Foreign matter

Class 3

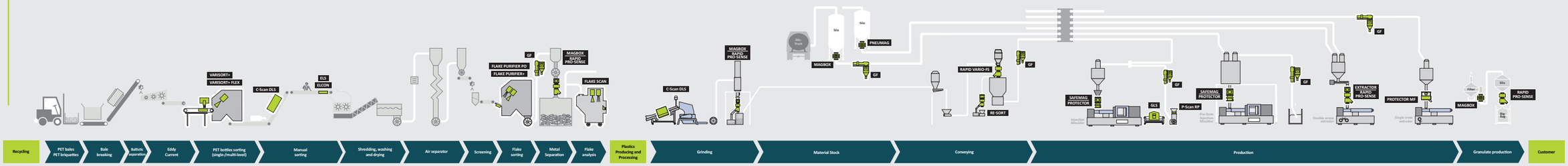
- Heterogeneous input material
- Pre-sorting stage for several fractions
- Example:
  Color mixture

Explaining the three sorting modes simply

Scan QR code now, watch the video and get even more information!

Presorting

The PRE-SORT takes over the thorough sorting of plastic regrinds and thus ensures a high-quality input product to the plastics production.



PROCESSING SYSTEM

PRE-SORT VCM

The compact high-end system
for regrind sorting

CMN
Sensor

1.000 kg/h
Throughput

2–10 mm
Grain size

Mobility

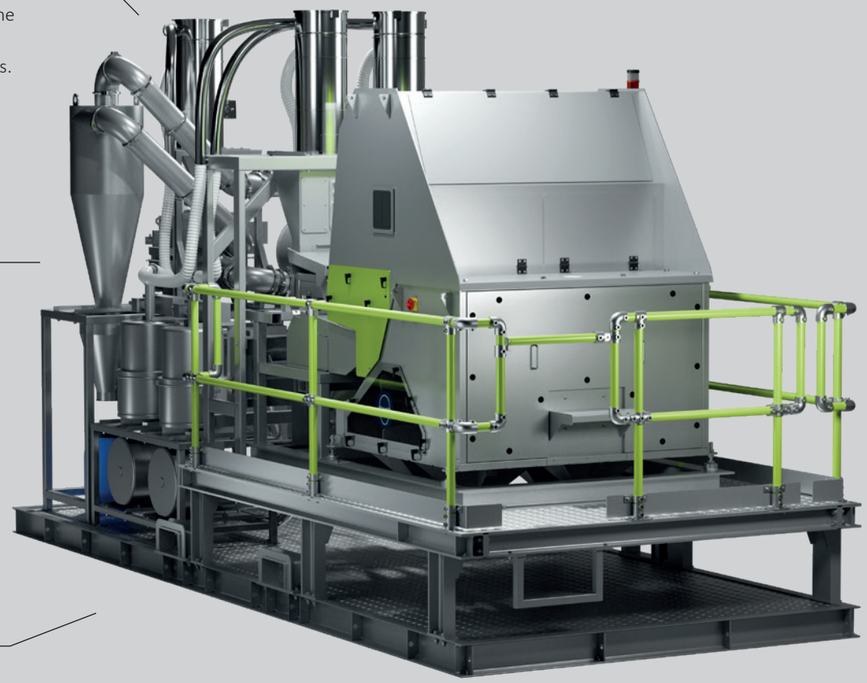
Due to its design in the form of a self-contained sorting platform, the PRE-SORT can be transported from one location to another and can thus be used flexibly and at different locations.

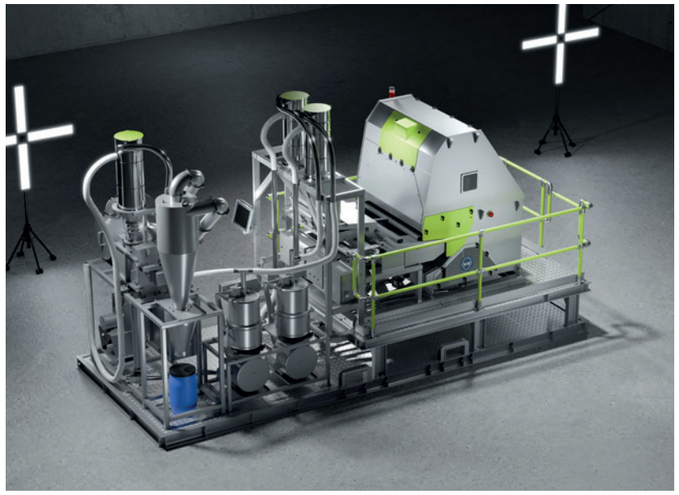
Process variability

The PRE-SORT offers maximum process flexibility through any combination of sensors and a choice of different sorting sequences. Thanks to two tracks for automated double sorting, the sorting platform also ensures first-class material quality.

Sensor flexibility

Intelligent sensors for color, polymer and metal sorting are combined in this device. Depending on the sensor combination selected, sorting can thus be performed according to colors, types of plastic and metals, or only according to individual factors.





Application in plastics processing: Sorting of regrind

Free consultation

www.sesotec.com/en/contact

Technical data PRE-SORT VCM

Working width [mm]	1024 (divided into two tracks)
Throughput up to [max. kg/h]	1000
Power [max. KVA]	14
Protection class	IP54
Dimensions	5.900 x 2.350 x 3.270 mm (L x B x H)
Suitable products	Plastic regrind
Suitable grain sizes [mm]	2–10
Temperature range	+5° C to +40° C
Compressed air consumption	0,5–3 m³/min

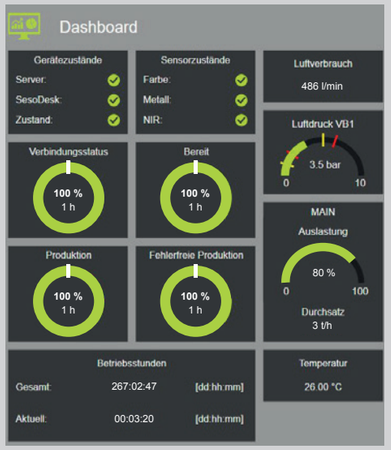
Available options

Bigbag Single Emptying Station	Stable steel construction with lifting frame for big bags with a maximum of 2,000 kg
Bigbag Double Emptying Station	Stable steel construction with lifting frame for big bags with a maximum of 2,000 kg with automatic switching function for continuous operation
Bigbag Filling Station	Stable steel construction including a rotary flap and fill level sensor for two big bags and continuous operation
Material Conveying Device	Conveying device for use at the filling station

Software: VISUDESK

With the VISUDESK visualization software, process data can be easily and clearly displayed on all Sesotec devices. Based on this data, you can derive targeted measures to increase efficiency and effectiveness on the one hand and minimize downtime on the other. The OPC UA-based machine communication model is implemented both on the devices and on a server, thus enabling both stationary and mobile access to the application.

- Control of the sorting process
- Optimization of the sorting plant
- Predictive maintenance
- Reduction of downtime
- Fact-based decisions



Dashboard visualization of process data, valve data, evaluation data and material data

REMOTE ACCESS AND SERVICE HOTLINE

Fast, reliable service

Telephone support

Many questions and incidents can be resolved over the phone.
Our free telephone support is available daily from 6am-8pm, and on weekends from 8am-5pm.

Service Hotline Sorting
+49 (0) 8554 - 308 129
service.sorting@sesotec.com

Remote Access

Sesotec service technicians have direct access to your machines via Ethernet connection and can perform error analyses, optimizations and parameter settings.

Augmented Reality

In addition to telephone support and remote access, Sesotec also offers video-based support with augmented reality. This is done via the TeamViewer Pilot app.

Would you like to learn more about our technical solutions for the plastic industry?

Then contact us directly. We will be happy to advise you.
You can reach us via:

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