FLAKE SCAN
Analysis system for plastic flakes and regrind

- Universally applicable in plastics recycling and processing
- Analyze samples for polymer types, false colors, and metal particles within minutes
- Perform manual, visual, and thermal analyses with less effort
The challenge

The guarantee of high quality of plastic flakes and regrind is crucial in determining whether plastic processors and manufacturers can profitably use and sell plastic recyclate. Depending on how the recyclate will be used, but also as a means of evaluating the recycling sorting process, elaborate manual, visual, or thermal sample analyses are often necessary in order to assess the quality of a batch of materials. Such sample analyses are hardly representative, and furthermore require additional resources, costs, and time.

Device features

- Analyzes flakes and regrind of materials such as PET, PP, HDPE, and mixed plastic flakes according to their material composition for polymer types, false colors, and metal particles
- Combine up to three sensors: Color sensor, near-infrared sensor, metal sensor (optional)
- Sample volume: up to 8 liters for representative results
- Throughput: up to 20 kg/h
- Simple operation via touchscreen
- Automatic reporting and archiving of analysis results

Performance characteristics

With the FLAKE SCAN analysis system, it takes only a few minutes to precisely determine the quality of plastic flakes and regrind.

Efficient
- Analyze samples for polymer types, false colors, and metal particles within minutes
- Quickly assess the composition of batches of plastic flakes

Precise
Automatically performs precise, reproducible analyses of material samples with the help of up to three integrated sensors:
- Color sensor
- NIR sensor
- Metal sensor (optional)

Profitable
FLAKE SCAN virtually eliminates the need for labor-intensive sample analyses and significantly reduces the efforts involved in performing manual, visual, and thermal inspections. By enabling quick and informed decisions about the viability of plastic flakes and regrind, FLAKE SCAN helps increase the profitability of using plastic recyclate. Furthermore, the results provide valuable insights into the recycling process and the functionality of various components.

Quality control of plastic flakes
Manual analysis vs. sensor-based FLAKE SCAN

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Manual analysis</th>
<th>FLAKE SCAN</th>
<th>Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Throughput rate</td>
<td>Low</td>
<td>High</td>
<td>Higher representativity of results</td>
</tr>
<tr>
<td>Analysis time</td>
<td>High</td>
<td>Low</td>
<td>Less manpower required due to time savings</td>
</tr>
<tr>
<td>Sample amount per day</td>
<td>Low</td>
<td>High</td>
<td>100% of sample analysis and zero human error</td>
</tr>
<tr>
<td>Sample size</td>
<td>Low</td>
<td>High</td>
<td>Higher insight on material purity</td>
</tr>
<tr>
<td>Analysis accuracy</td>
<td>Mid</td>
<td>High</td>
<td>Allows fact-based decisions</td>
</tr>
<tr>
<td>Representativity</td>
<td>Low</td>
<td>High</td>
<td></td>
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SesoDesk operating software

Inspecting for polymer types, false colors, and metal particles
Analysis results can be displayed either in a table or in diagrams. Should predefined limits for polymer types or false colors be exceeded, this will be marked accordingly in the table. The amount of identified metal contaminants will also be displayed.

Saving data
From the “History” menu, you can quickly compare the purity and color quality of the current batch with those of archived samples.
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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