

The analysis of materials and material flows has been part of the core competence of RTT System GmbH since its foundation in 2010. All products are characterized by a very high proportion of in-house production and development.

The flakeanalyser 2.0 is the first AI-based multi-sensor analysis system for fast and non-destructive quality control and material analysis of regrind or plastic flakes.

The state-of-the-art HSI technology enables a very wide range of detectable materials.

In combination with the complete integration of a high-resolution colour camera, this setup makes it possible to display the material-related colour distribution over all detected objects. This combination of camera data is the basis for quality assessment and can also be helpful in determining further process steps.

The point-by-point measurement of colour and material forms the basis for the AI-based evaluation of the analysis data.

The flakeanalyser, in its second generation, is now able to statistically evaluate black or dark objects. In practice this means a more precise material distribution, since these objects are at least included for the statistics.

The system is equipped with a suction device, which discharges the sample into a collection container after the measurement. This makes the system self-cleaning. The necessary camera adjustments as well as the material feed and distribution are carried out automatically.



RTT System GmbH
Hirschfelder Ring 9a
02763 Zittau | Germany

T +49 (0) 35 83 54 089 - 0
F +49 (0) 35 83 54 089 - 83

info@RTT-System.de
www.RTT-System.de



flakeanalyser

Hyperspectral Imaging Sensor System



flakeanalyser

The flakeanalyser is an NIR-Analysis-Device for fast and non-destructive quality control and material analysis of plastic regrinds.

DEVICE FEATURES

- AI-based analysis of regrinds and plastic flakes according to type of
 - material
 - object colour
 - volume
- simultaneous allocation of detected objects according to color and material
- statistical consideration of black and dark objects
- weight-related evaluation based on measured volumes
- determination of particle size distribution
- convertible to continuous measurement (inline version)
- modern and solid design
- intuitive operation via touch screen
- automatic output of protocols
- automatic archiving analysis results

TECHNICAL DATA

- | | | | |
|---------------------------------------------------------------------------|---------------------------------------------------|-------------------------------------------|----------------------------------------|
| ■ Dimensions:
1.670 mm height
1.050 mm width
795 mm depth | ■ Weight:
approx. 250 kg | ■ Grain sizes:
2 - 30 mm | ■ Sample volume:
approx. 8 l |
| | ■ Connected load:
2,1 kW (230 VAC, 16A) | ■ Throughput:
approx. 250 g/min | |



MADE IN GERMANY

FILLING

The sample material enters the unit via a feed hopper.

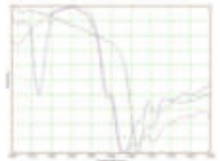


USER INTERFACE



ANALYSIS VIA NEAR-INFRARED SPECTROSCOPY

Sensor system with high-resolution hyper-spectral imaging technology captures characteristic spectrum.



RETURN

The analysed sample material is dispensed into a collection container after completion of the measurement.



RESULT

The results are output via EXCEL, e-mail dispatch and label printer.

APPLICATION EXAMPLES

- Polyolefins
- Plastics in electronic scrap
- PET flakes