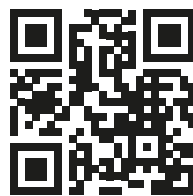


The processanalyser is based on the proven AI analysis system of our flakeanalyser 2.0, which includes a high-resolution sensor system for the simultaneous detection of different materials and colours as well as three-dimensional shapes.

The intelligent detection technology in combination with AI-based object recognition opens up almost unlimited application possibilities for the processanalyser.

For example, it can be used for inline quality control of a PET bottle fraction, determining the proportion of recyclable materials in the residual stream or inline analysis of 2D/3D polyolefin mixtures with a particle size of <40 mm upstream of a reactor.

The semi-mobile design of the process analyser supports the high flexibility of the application options. This allows the complete analysis unit to be moved within the plant in less than an hour in order to take on a new task for quality assurance and process optimisation.



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**THE BEST  
OF BOTH WORLDS!**

AI-based object detection in conjunction  
with state-of-the-art NIR sensor technology



**processanalyser**

Sensor system for inline quality analysis



# processanalyser

Inline quality monitoring of mass flows by means of sensorfusion and AI-based data evaluation

## DEVICE FEATURES

- AI-based analysis of
  - 2D-/3D- materials
  - shaped materials
- Analysis according to
  - material type
  - colour
  - volume
  - Object class (e.g. bottle/bowl; 2D/3D)
- Online recording of mass flows
- Semi-mobile design
- Simple mounting on existing conveyor belt (inclination 0° – 35°)
- Modern and solid design
- Intuitive operation via touchscreen
- Automatic archiving of analysis results
- Various interfaces to the higher-level control system



## TECHNICAL DATA

**Detection dimensions (H x W x D):**  
1,250 x 650 x 680 mm

**Switch cabinet dimensions on wheels (H x W x D):**  
1,300 x 1,000 x 400 mm

**Weight:** approx. 50 kg

**Connected load:** max. 2.5 kW

**Grain sizes:** 6 – 350 mm

**Suitable conveyor belt widths:** 600 – 2,000 mm

**Maximum belt speed:** 1.5 m/s



## USER INTERFACE



## ANALYSIS VIA NEAR-INFRARED SPECTROSCOPY

- Reliable material detection using near infrared spectroscopy
- Additional possibility of object classification through AI-based shape and colour evaluation

## RESULT

- Integration of the real-time evaluation into the existing control system, additional e-mail dispatch in the event of deviations



## APPLICATION EXAMPLES

- Inline quality control of critical material
- Material flows
- Input analysis after pre-shredder
- Quality determination before extrusion
- Evaluation of materials from recirculation