Developed for the different requirements of the Compound-, Masterbatch- and Recycling Industries the innovative, modular PURITY CONCEPT Systems from SIKORA promise highest material quality and stable processes.

Inspection and analysis of pellets, flakes and films/tapes

Flexible design and strong technologies

With the groundbreaking models of the PURITY CONCEPT Systems SIKORA gives an outlook on the versatile potential of its systems for offline inspection and analysis of the plastic material. Depending on the application, the systems are equipped with X-ray technology (X) or optical sensors (V) to be used during the production or for sample testing and detect contamination from 50 µm. Regarding the integrated technologies SIKORA draws on several decades of experience in the cable as well as hose and tube industry.

Specifications

Measuring Principle*	PURITY CONCEPT X: X-ray technology PURITY CONCEPT V: Optical CMOS Line Scan color camera
Application	Pellets, flakes, films/tapes, sheets and injection moulded parts
Detectable Contamination	PURITY CONCEPT X: metallic, inhomogeneities, cross-contamination PURITY CONCEPT V: contamination and black specks in transparent material, respectively, on the surface of diffuse and colored material
Smallest Detectable Contamination Size	X-ray: 50 µm (cube 3D), 50 x 50 x 50 µm Optical: 50 µm (square 2D), 50 x 50 µm
Permissible Environmental Temperature/Pellet Temperature	+ 10 to + 40 °C
Interfaces	USB Optional: LAN
Power Supply	PURITY CONCEPT X: 230 V AC (alternativ 100 V AC oder 115 V AC) ± 10%, 50/60 Hz PURITY CONCEPT V: 100 - 240 V AC ± 10 %, 50/60 Hz
Dimensions	PURITY CONCEPT X: 1,309 x 831 x 1,882 mm PURITY CONCEPT V: 1,090 x 575 x 921 mm (width x height x depth)

PURITY CONCEPT X (X-ray technology)

PURITY CONCEPT X is based on X-ray technology and detects and analyzes for example metallic contamination inside opaque pellets and flakes. Thanks to the modular design concept, colored films and tapes can also be inspected.

PURITY CONCEPT V (optical sensors)

PURITY CONCEPT V is based on optical sensors and detects and analyzes contamination or defects such as “black specks” or yellow discolorations on transparent pellets and flakes. Thanks to the modular design concept, transparent films and tapes can also be inspected.

Your Benefits

- Highest material quality and stable production processes
- Modular concept for different analysis requirements (inspection of pellets, flakes, films/tapes)
- Offline operation
- X-ray or optical inspection

Technical Article

RCS relies on SIKORA technology for recycling