RAPID PRO-SENSE
High-performance metal separator for free-fall applications

- Accurate inline detection and separation of magnetic and non-magnetic metal contaminations, even if such contaminations are enclosed in the product
- Accurate and reliable metal detection for quality inspection in plastics and compound production
- Protects against customer complaints
- Protects processing machines and moulds against damage and choking, reduces production downtimes
- Offers a rapid return on investment
**RAPID PRO-SENSE**

**Performance features**

- Highest scanning sensitivity for all metals due to innovative HRF technology (High Resolution Frequency)
- Modular system design for optimal adaptation to customer- and material-specific requirements
- Auto-learn function or manual product effect compensation for optimal compensation of the intrinsic conductivity of the material to be inspected
- Cleaning and auto-clean systems available as an option
- Low mounting height even with large nominal widths guarantees easy integration of the metal separator in existing pipe systems
- Quick and easy installation due to Jacob standard connections
- Increased interference immunity to electrosmog and vibration
- Outstanding ease of operation with GENIUS+ Control Unit with LCD graphic display
- Product-contacting metal components completely made of stainless steel 1.4301 (AISI 304)

**Function**

The RAPID PRO-SENSE metal separator is used for the inspection of bulk materials in free-fall conveyor pipes. It detects and separates all magnetic and non-magnetic metal contaminations (especially also stainless steel, aluminium, non-ferrous metals, ...) – even if such contaminations are enclosed in the product. The reject unit reliably separates metal contaminations from the conveyed material flow.

The RAPID PRO-SENSE metal separator predominantly is used for the quality inspection of bulk materials in plastics and compound production.

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**Application:**

The RAPID PRO-SENSE metal separator primarily is used for quality inspection (product purity) in the production and compounding of plastic granulate, where it typically is installed directly before the material is filled in bigbags, octabins, or silos. The metal separator also is used for quality inspection in the incoming goods department of plastic-processing plants (product purity, machine protection).

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1. Infeed
2. Detection coil
3. Metal contamination
4. Separation flap
5. Waste rejection
6. Material outlet
7. Separation unit (turnable, removable)
The detection unit with innovative HRF technology (High Resolution Frequency) was developed especially to ensure an optimal scanning sensitivity for all metals. The detection signal is transmitted with a special frequency and evaluated. In addition to ferrous and non-ferrous metals, even smallest particles of non-magnetic stainless steel can now be detected and separated even more efficiently.

**GENIUS+ Control Unit:**
- Digital signal processing and quartz-stabilised detection frequency
- State-of-the-art microprocessor technology with self-monitoring, self-balancing, and temperature compensation
- Product compensation with auto-learn function
- Multi-product memory for up to 240 products
- Password protection/access protection
- Special EMC combination filter to suppress external interference

**Modular system concept:**
- Detection unit with innovative HRF technology
- Standard reject unit “Quick-Flap”
- Round reject unit for powder
- Reject unit with swivel hopper for special materials

**Scope of delivery:**
- Metal separator with integrated detection unit and reject unit (with Jacob quick-connect fasteners)
- Detached GENIUS+ Control Unit

**Options/accessories:**
- Round reject unit for the inspection of materials containing powder
- Hopper reject unit for the inspection of special materials, or for special requirements concerning cleanability and wear protection
- Cleaning and auto-clean units depending on the reject unit
- High-temperature design
- Special design for abrasive bulk materials
- GENIUS+ Touch Control Unit for increased ease of operation
- Insight.Net and InsightLog.Net control and evaluation software
- Magnet systems for the pre-separation of ferrous metals
- Optical and acoustical signalling devices
- Digital event counter
- Compressed-air monitor
- ATEX version
- UL/CSA certificate
Sesotec system world

Detecting and separating contaminants:
- Removing contaminants:
  - metals
  - plastics
  - glass
  - ceramics, porcelain, stones
  - and many others
- Removing from (good material):
  - bulk materials
  - liquids and pastes
  - individually packaged product
  - packed and loose items
- Product types:
  - end-products (food, textiles, plastics etc)
  - industrial raw materials
  - recycled materials
- can be integrated into all types of conveyor systems

Detecting and separating sub-standard products:
- Qualitative defects:
  - incorrect colour
  - agglomerations
  - breakages
  - air inclusions in packs
  - incorrect positioning / distribution
- Quantitative defects:
  - incorrect weight
  - count errors (incorrect number of items in package)
- Product types:
  - end-products (food, textiles, plastics etc)
  - industrial raw materials
  - recycling materials
- can be integrated into all types of conveyor systems

Sorting mixed materials into single fractions:
- Types of material:
  - glass
  - plastics
  - metals
  - and many others
- Delivery flows:
  - bulk materials
  - individually packaged product
- can be integrated into:
  - conveying systems
  - bulk material flows

For further information or to discuss your particular application contact one of our specialists.