

## 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





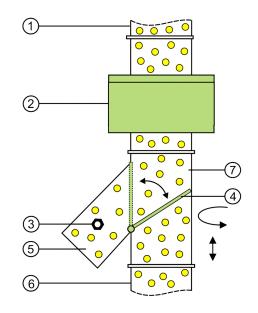
## RAPID PRO-SENSE Performance features

# Function

- 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 ONE Control Unit with 5" touchscreen
- Product-contacting metal components completely made of stainless steel 1.4301 (AISI 304)

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.



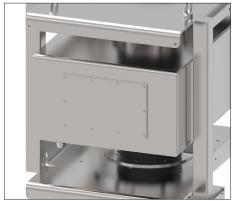
- 1 Infeed
- Detection coil
- ③ Metal contamination
- ④ Separation flap
- ⑤ Waste rejection
- 6 Material outlet
- ⑦ Separation unit (turnable, removable)



#### 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).

## HRF technology (High Resolution Frequency)



Detection unit with innovative HRF technology

Modular system concept:

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 nonmagnetic stainless steel can now be detected and separated even more efficiently.

#### **GENIUS ONE 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 300 products •
- Password protection/access protection •
- Special EMC combination filter to suppress external interference



Standard reject unit "Quick-Flap"

#### Scope of delivery:

- · Metal separator with integrated detection unit and reject unit (with Jacob quick-connect fasteners)
- Detached GENIUS ONE Control Unit



Electronic Control Unit GENIUS ONE





(Image contains options)

- 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

Round reject unit for powder

**Options/accessories:** 

- Special design for abrasive bulk materials
- 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

Reject unit with swivel hopper for special materials

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... and more than 40 agencies worldwide

Made in Germany

### 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

contact one of our specialists.



### **Detecting and** separating sub-standard products:

- Qualitative defects:
- incorrect colour
- agglomerations
- incorrect positioning /
- incorrect weight
- of items in package)

#### Product types:

- industrial raw materials



Sorting mixed materials into single fractions:

Types of material:

- glass
- metals
- and many others
- Delivery flows:
  - bulk materials
  - individually packaged product
- can be integrated into:
  - conveying systems bulk material flows

breakages air inclusions in packs distribution

- end-products (food, textiles,

plastics

- plastics etc)
- recycling materials

can be integrated into

all types of conveyor systems

For further information or to discuss your particular application

# www.sesotec.com



**Choose the Original Choose Success!** 

### Quantitative defects: count errors (incorrect number

