

HIGH PRECISION

INTELLIGENT

CUSTOM MADE



- ▶ protects against machine damage and production losses
- ▶ reduces costs and increases productivity
- ▶ guarantees metal-free bulk materials
- ▶ separates magnetic (iron, nickel, ...) and non-magnetic metals (high-grade steel, aluminium, brass, ...)
- ▶ also separates metals that adhere to the product or are enclosed in the product

RAPID COMPACT Metal Separator

- ▶ for free-fall applications



■ Fields of application

The metal separators of the RAPID COMPACT series remove ferrous and non-ferrous metals from free-falling pourable bulk materials.

Costly malfunctions of machines and repairs of moulds are reduced. Productivity is considerably increased.

In addition the metal separator is an important component of quality assurance. It is used both for intermediate inspection after certain production stages and for the inspection of outgoing goods.

■ Typical applications

In the plastics industry the RAPID COMPACT metal separator is often integrated in a pipe after a cutting mill, a cyclone, or a dosing unit (rotary valve, vibration chute).

Mounted on a mobile rack, the metal separator offers many individual possibilities of application, such as for example the cleaning of smaller batches.

Of course the RAPID COMPACT metal separator is also suitable for similar applications in other branches of industry (e.g. in the feed and chemical industry).



RAPID COMPACT metal separator employed for machine and mould protection before the pre-drier of an injection moulding machine

■ Performance features

The decisive advantage of these metal separators is their extremely low overall height. They can therefore be easily installed in (already existing) pipe systems. The minimum mounting height is achieved by:

1. the separating system with its extremely fast-acting eject flap ("Quick Flap System")
2. round standard connections, because no additional special transition pieces are required.

Another essential advantage of the "Quick Flap System" is the minimum loss of good material in the separation of metal impurities.

■ Available system sizes

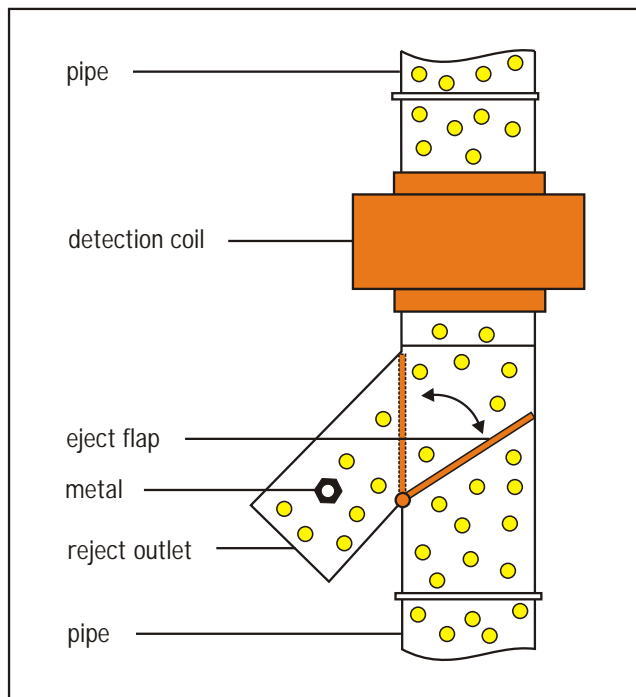
As a standard, the metal separator is available with the following nominal widths: 30, 50, 70, 100, 120, 150, 200, 250 mm.

Additional sizes and versions (e.g. for the examination of materials at higher temperatures) are available on request.



RAPID COMPACT metal separator employed for quality inspection in the process of filling into big bags

Functional principle



When the optimum customer-specific scanning sensitivity and eject duration have been set, the metal separator runs in fully-automatic operation without interruption of the flow of material.

Automatic self-balancing, permanent self-monitoring, and temperature compensation are further important performance features of the RAPID COMPACT metal separator.

Various supplementary devices such as warning systems and counters can be controlled by means of relay outputs that are activated in case of metal or error detection.

In case of an error of the metal separator or in case of a mains failure, the separating flap remains in "eject" position until the error has been remedied.

If the system must be installed at a place that is difficult to access, the control unit can be placed at a distance of up to 10 meters.

RESEP re-separation unit



*RESEP
re-separation
unit*

With the mobile RESEP re-separation unit, bulk materials with a high content of metal impurities can be cleaned and fed back into the production cycle. Loss of value and disposal costs are thus reduced to a minimum.

By way of dosed charging with a suction conveyor and a vibration chute, the bulk material reaches the RAPID COMPACT metal separator in strongly thinned out condition. Metal particles are selectively separated. This makes it possible to re-use almost 100% of the recycled bulk material.

The MAG 4200 metal separator is used for the examination of highly metal-contaminated bulk materials at high throughput rates - primarily in the field of recycling.

For detailed information on the systems of the RAPID COMPACT series please refer to the "technical data sheets".



RAPID COMPACT metal separator installed before a twin screw extruder for the examination of PVC powder