

PROTECTOR PROFESSIONAL

High-performance Metal separator for extruders, injection-moulding and blow-moulding machines

- Detects magnetic and non-magnetic metal contaminants, even if such contaminants are enclosed in the product, and reliably separates them from the material flow
- Reduces costs caused by mould and machine damage and production losses
- Guarantees product quality
- Protects against customer complaints
- Offers a rapid return on investment



- Extremely high scanning sensitivity for all metals even under high mechanical loads, e.g. with heavy conveyor, dosing, mixing, and feeding units mounted on top.
- Metal contaminants are automatically and reliably separated into a closed collecting container through a 2 m spiral tube (option).
- The metal separator guarantees a safe and reproducible function even if the material has a high regrind content (dust).
- The space-saving, compact system design allows quick and easy installation.
- Adapter plates for the quick connection of material conveyors of different manufacturers are available as an option.
- Auto-Set (auto-teach function) or manual product compensation (no fixed setting) for improved adaptation to the intrinsic conductivity of the product to be inspected
- Pre-set operating parameters for easy operation.
- Minimum loss of good material due to proven "Quick-Valve" reject unit and venturi nozzle.

Function:

Frequently even smallest metal particles in the plastic melt are the cause of expensive malfunctions in injection moulding, extruding, and blow moulding. With the growing use of regranulate and regrind materials the proportion of such metal contaminations is further increasing. Choked nozzles, filters, and hot-runner systems frequently enough result in loss of production, downtimes, and delayed deliveries. The PROTECTOR PROFESSIONAL metal separator is installed directly above the material inlet of an injection-moulding machine, extruder, or blow-moulding machine. It detects all magnetic and non-magnetic metal contaminants (steel, stainless steel, aluminium, ...) – even if such contaminants are enclosed in the product. Metal contaminants are automatically and reliably separated by means of the reject unit ("Quick-Valve").

The special design of the PROTECTOR PROFESSIONAL guarantees highest scanning sensitivity for smallest metal particles even under high mechanical loads, which may result from high superstructural assemblies, for example when various conveying, dosing, mixing, or feeding units are used simultaneously. The design with integrated reinforcing frame ensures that the high-performance detection unit is in no way affected by vertical mechanical forces.

Scope of Delivery:

- Metal separator with detached Control Unit PRIMUS+

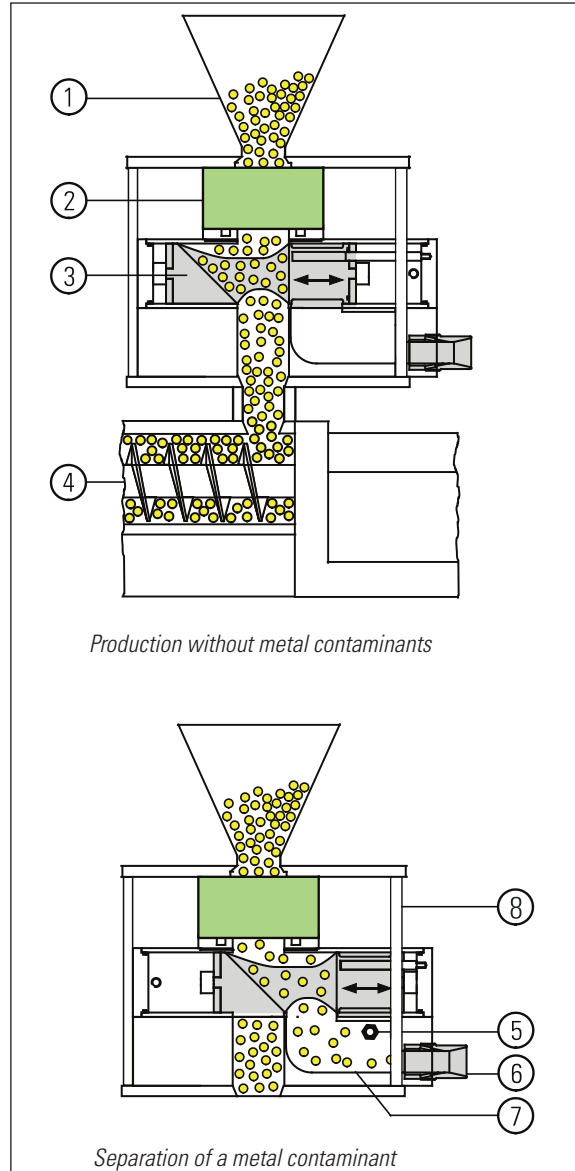
Accessories / options:

- Optical and acoustical signalling devices
- Digital counter (number of metal separation events)
- Button for manual separation in own housing
- Button for function test in own housing
- Compressed-air monitor
- Collecting container for reject material, with spiral tube
- Sesotec adapter plate system
- SAFEMAG magnet separator or hopper magnet for iron pre-separation
- UL/CSA certificate
- Special mains voltages

Typical fields of application:

- Plastics-processing industry

Function chart:



- | | |
|------------------------|--------------------------|
| 1) Material hopper | 2) Detection coil |
| 3) Separation unit | 4) Converting machine |
| 5) Metal contamination | 6) Venturi nozzle |
| 7) Reject outlet | 8) Reinforcing framework |

Used for:

- Mould and machine protection for extruders, injection-moulding and blow-moulding machines with high scanning sensitivity requirements
- Especially suited for use under high mechanical loads resulting peripheral units that are mounted on top

If you need more detailed information ask for our technical data sheet or a discussion with our experienced Sesotec sales team.