

Herbold Dry Cleaner Type TR 120/230

A Herbold dry cleaner is used for cleaning plastic regrind without additional water or other cleaning liquids.

Depending on the requirements of the final product and the type of contamination of the infeed material, the Herbold dry cleaner is an alternative to complex washing processes for the separation of contaminants. With these special applications, dry cleaning of the regrind results in sufficient product purity with low investment and low operating costs.

Mode of operation

The plastic regrind is fed into the infeed chute of the machine via various means of conveying, e. g. conveyor belts, screw conveyors or pneumatically. A rotor equipped with wings rotates inside the dry cleaner, picking up the regrind and accelerating it in a circular motion. The rotor is enclosed by a fixed polygonal screen drum

in which this movement takes place. The special order of the rotor wings results in an axial movement within the screening drum in the direction of material ejection. The high friction resulting from this combined movement, together with the polygonal screen drum, breaks up contaminants adhering to the plastic regrind as well as exposed foreign particles and separates them through the holes in the screen drum. Fibrous contaminants, such as paper/wood, can be separated to a high degree this way.

The machine is equipped with a rotating screen drum cleaning device that prevents the screen holes from clogging. The separated contaminants are discharged from the machine housing via an integrated screw conveyor. A separate suction unit removes light contaminants, dust and fine particles from the machine.

The cleaned regrind is ejected from the machine by the rotor at the end of the processing section and is usually fed into the subsequent process step via a pneumatic conveyor.

Due to their contamination, the materials that are typically processed cause a high degree of wear on the tools inside the machine. To counter this problem, all wear parts can be replaced quickly and easily. Exchangeable wear plates on the rotor wings, a segmented screen drum and armored inner surfaces in the process chamber are standard features of the machine.

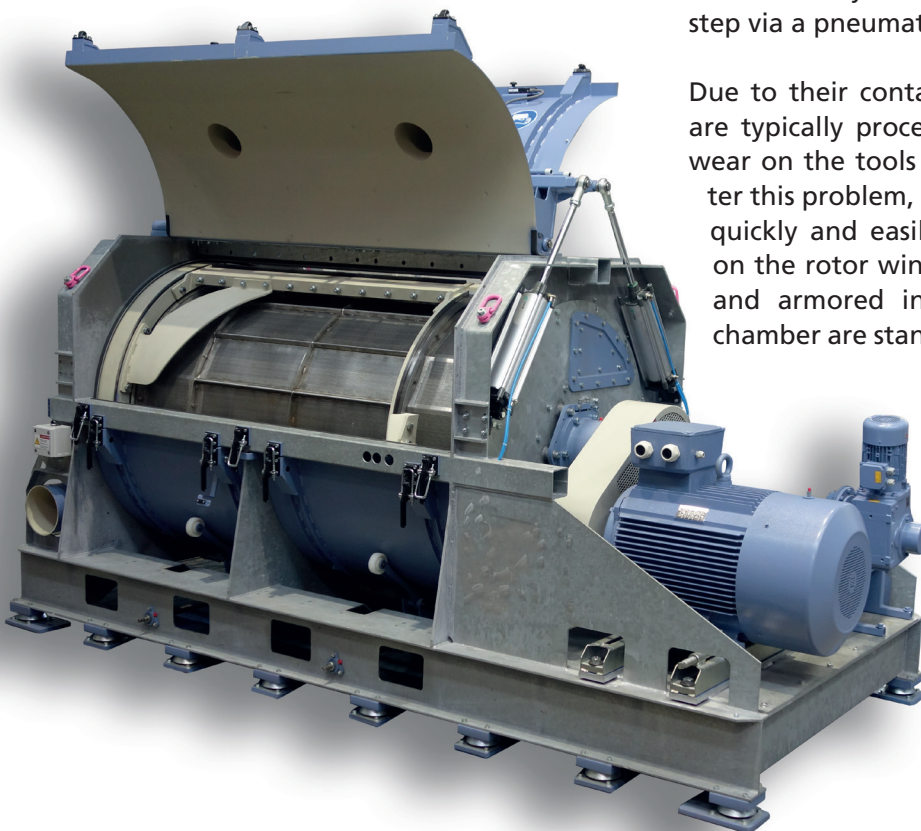


Fig. 1: Dry cleaner with hingeable maintenance side walls and rotating cleaning device

Examples of infeed materials

(materials must be size reduced before entering the machine):



Fig. 2: Film



Fig. 3: HDPE



Fig. 4: PET bottles

When using infeed materials with coarse foreign objects, such as stones, metals, glass or ceramic pieces, we recommend installing the Herbold heavy material separator upstream of the dry cleaner. The heavy material separator offers effective protection against costly machine damage and the associated downtime (See Herbold information sheet 72).

Technical features of the Herbold dry cleaner

- Hot-dip galvanized housing for excellent corrosion protection
- Optimum accessibility thanks to large maintenance side walls on both sides; no forklift or crane required for screen changes
- Rotor with replaceable wear plates made of wear-resistant material
- Screens are easily replaced as individual elements screwed onto a frame
- Screen perforations and screen material adapted to the application
- Continuous screen cleaning, no clogging of the screen perforations
- Screw conveyor arranged at the side of the housing for discharges of the separated impurities
- A pressure relief blower prevents the formation of excess pressure and removes fines from the interior
- External bearings
- Central lubrication device for automatic lubrication of all bearings
- The dry cleaner can be equipped with its own screw feeder for poorly flowing materials

Technische Daten

Screen basket diameter	Working length	Drive	Length	Width	Height	Height when opened	Capacity rigid plastics	Capacity film
1200 mm	2300 mm	75 - 132 kW	4000 mm	2000 mm	2200 mm	3000 mm	4t/h	1,8t/h

The performance data may vary upwards or downwards depending on the nature of the infeed material.

Our Product Range

Size Reduction

- Shredder
- Granulators
- Pulverizing Systems

Washing / Separation Systems & Components

- Pre-washing Units
- Friction Washers
- Separation Tanks and Hydrocyclones
- Mechanical and Thermal Drying
- Water Processing

Agglomeration

- Plastcompactors

Service

- Parts and Overhauls
- Inspections and Trouble Shooting
- Upgrades and Performance Service

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