

AirWash

Data sheet

The Kongskilde AirWash system is a combined conveying and cleaning or de-dusting of plastic regrind material for effective recycling.

The Kongskilde AirWash System has a powerful blower, which is used to convey plastic regrind materials from e.g. a granulator or debagging stations to the Air Wash separation cyclone. Dust and fines are separated from the plastic regrind in 2 steps. First adjustable cleaning is done in the separation cyclone where the material is cleaned by the vortex efficiency in the cyclone. The second cleaning is done in a cascade section where the material is falling by gravity passing adjustable vacuum slots.

After the cleaning the material can be recycled/reused directly in the production line again.

The dust and fines which has been separated from the regrind can be blown to an optional filter bag manifold with collection drums or for continuous operation Kongskilde offers an independent dust cyclone with airlock in combination with the filter bag manifold.

Benefits achieved by the AirWash System.

- De-dusting of regrind materials
- Angel hair removal from regrind and pellets
- Inline recycling of regrind
- Improved quality of regrind
- In-house recycling process

The Kongskilde AirWash system is build up by modular components for easy and flexible installation in an existing production facility.

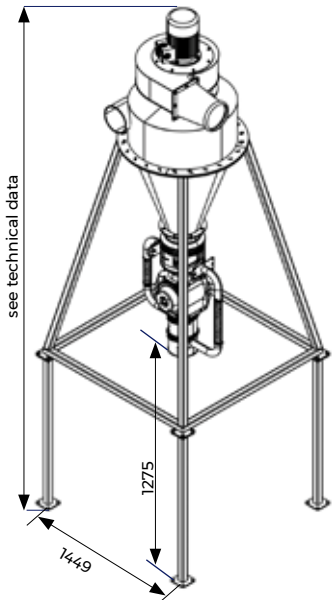
Examples of materials suitable for handling in an AirWash system are regrind and pellets of:

- PP
- PET
- HDPE
- LDPE
- LLDPE
- Nylon
- ABS
- Acrylics
- Polystyrene
- Rubber
- And more

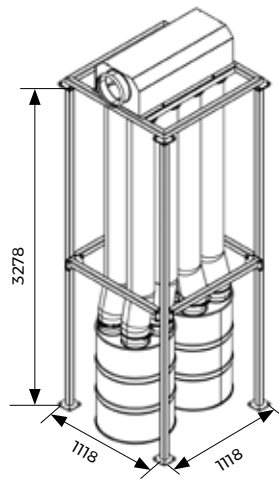


Cascade system.

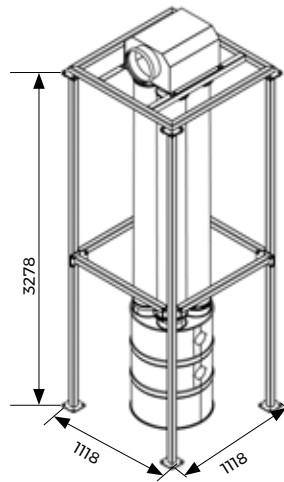




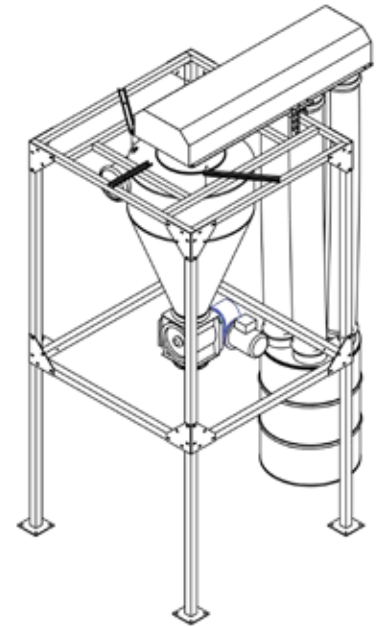
Frame for AW 50E and AW 100E and AW 150E.



Filter-manifold with 8 bags for AW 100E and AW 150E.



Filter-manifold with 4 bags for AW 50E.



Dust cyclone with 4 bags filter manifold for AW 50E. For AW 100E and AW 150E a 9 bags filter-manifold is used.

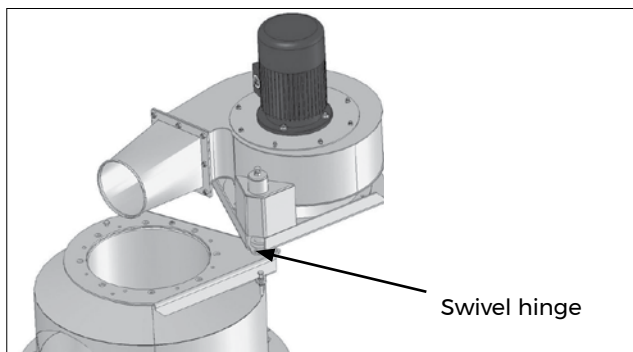
Technical Data

Type	AirWash AW 50E	AirWash AW 100E	AirWash AW 150E
Blower, kW (hp)	4 (5)	7.5 (10)	11 (15)
Rotary valve, kW (hp)	0.55 (0.75)	0.55 (0.75)	0.55 (0.75)
Max. conveying output (Approx. Capacity subject of test), kg/h	225 - 450	450 - 900	900-1300
Height, with hinge for blower, mm	4200	4315	4400
Height, without hinge for blower, mm	4150	4265	4350
Frame extensions (antistatic equipment), mm	300	300	300

Accessories

Swivel hinge for the blower:

The standard AirWash System can be fitted with a swivel hinge for the blower that enables easy inspection, cleaning or maintenance.



Antistatic equipment:

For static materials it is highly recommended to add an antistatic eliminator between the material outlet of the rotary valve and the cascade section. When the static material passes the antistatic eliminator, ionized air removes the static charges in the material.

Test:

Kongskilde offers to run test materials through one of Kongskilde's test facilities located in Denmark or Illinois, USA.

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