

Clean Option

Active air filtration in the work area of the operative



Clean Option - Active air filtration in the work area of the operative

The problem:

- Strain on operators due to moulds, viruses and particulate matter (bioaerosols)
- Potential damage to health from contact with harmful substances
- Costs resulting from occupational diseases
- General odour problem during refuse collection

The solution:

1. The air curtain with the AirBlades

The ambient air is blown via radial blowers with the air blades into the tailgate. Due to the so-called induction effect, the air is accelerated and results in an air curtain, which counteracts the outflow of bioaerosols. The angular position of the AirBlades provokes that the air flow is always directed into the tailgate.

2. Extraction via a multiple stage filter element

The extraction system generates a vacuum in the tailgate, which ensures that there is always a flow of air from outside into the tailgate.

The extracted air must be cleaned prior to release into the environment. Due to the characteristics of the different particles a three-stage extraction is required:

1. **Coarse filter** for coarse particles and to protect the following fine filters (cyclone pre-filter)
2. **Fine filter** for moulds and fine dust, germs and viruses
3. **Activated carbon filter** absorbs odours

Main components

Air lock with AirBlades

Use of a radial fan with air distribution via ventilation pipes.

The ventilation pipes are galvanized, airtight to tightness class 4 (highest class), and flexible and adjustable by means of a plug-in system. The ambient air is drawn in at the upper tailgate through ventilation grilles. The ventilation grille serves to protect against coarse particles (e.g. leaves).

A roofing system protects against rain.

AirBlade

The air blade is made of anodized aluminium and is attached to the inner sides of the tailgate. The orientation can be adjusted in order to optimally protect the tailgate opening.

The defined gap of the air blade ensures a bundled air jet.

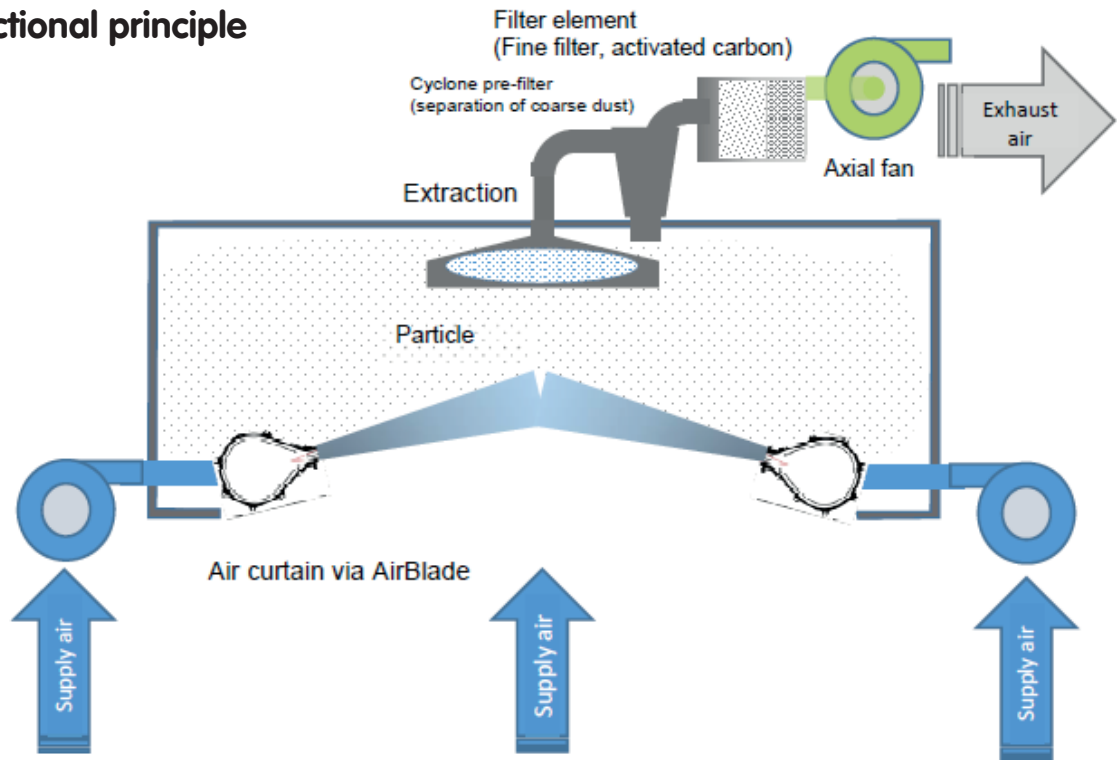
Extraction and filter element

The extraction is carried out via a cyclone filter to separate coarse dust, and an integrated filter element (fine filter, activated carbon). The filter element is designed to fit our requirements and can be purchased as standard wear part via our customer service.

The fan is waterproof with protection class IP68.

Roofing systems protect the system against rain. The cyclone filter unit has an active extraction system to increase the separation rate of the dust (the service life is extended).

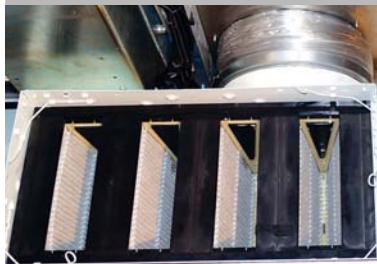
Functional principle



Airblade



Axial fan of the filter unit (exhaust air)



Filter element and extraction



Cyclone filter unit

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Technical data

- Filter performance approx. 2500 m³/h
- Electrical power consumption approx. 650 W
- Cyclone as a pre-filter for the separation of coarse and fine dust
- Replaceable filter element with a scheduled life of approx. 1/2 year, depending on the degree of pollution, as standard spare part.
- Pollution control for the filter element
- Lifetime of fans approx. 7000 operating hours (approx. 4 years)
- Integration into the existing lifter controller

ZOELLER-Lifter



MEGA -456

ROTARY III -2406

GAMMA -2349

OMEGA -359

Technik entscheidet

Technical innovations, high quality for maximum durability have made ZOELLER the largest manufacturer of hydraulic lifting/tipping devices for waste disposal.

Five technically mature platforms:

- DELTA
- ROTARY
- GAMMA
- OMEGA
- MEGA

are the basis for a high degree of customer-oriented variants.

ZOELLER is a turnkey supplier for rear loader type refuse collection vehicles, delivering on the basis of the following product lines:

- MICRO
- MINI
- MEDIUM
- MAGNUM

a unique range of body versions from 2 to 31 m³.

The portfolio is rounded off by:

- Sideloaders
- Interchangeable systems in different versions
- Special vehicles

ZOELLER **High-Level-Lifter** for closed refuse collection in residential and commercial areas

- The high performance DELTA:
The lifter system for the greatest collection performance

ZOELLER **Low-Level-Lifter** for open refuse collection in residential and commercial areas

- The compact ROTARY lifter:
The lifter for flexible collection
- The integrated GAMMA:
The lifter for the individual collection
- The comfortable OMEGA:
Great functionality in solid structure

ZOELLER **Commercial-Lifter** for the collection of large containers and commercial waste

- The Allrounder MEGA:
The sophisticated bulk-refuse container lifter for universal applications

ZOELLER guarantees with its platform strategy in time production of highest quality and absolute flexibility for individual customer requests.

ZOELLER stands for solidity and durability, high availability, sophisticated ergonomics as well as occupational safety, internationality and technical innovation.

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