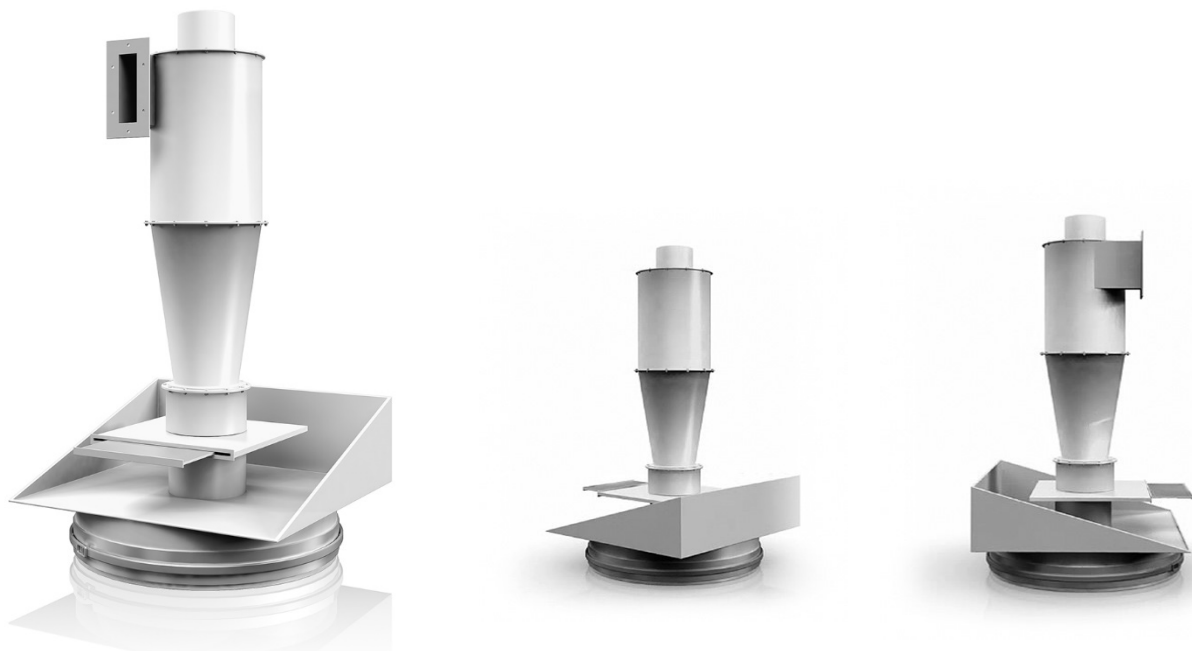


# Centrifugal Separator (Cyclone) Typ ZSA/ZSB/ZSC

For extracting fine dust from the air stream



## Functional Description

The particle-laden air stream enters the separator tangentially at the top, creating a rotating airflow (vortex). By centrifugal force, the dust particles are moved along the outside wall where they are separated and, in spiral motion, slide into a collection device (plastic bag) or dust container. It is also possible to mount a compacting power screw below the separator. In the lower part of the housing, the air stream is forced to reverse and flows upwards through the vortex tube (cyclone turbulence).

The centrifugal separators type ZSA, ZSB and ZSC are particularly suitable for separation of dust with low content of fibers and granules. Especially type ZSA operates with low pressure loss, and type ZSB achieves higher separation rates than type ZSA. Type ZSB with return air plenum combines high separation rates with low pressure loss through the use of a pressure regain piece in the head piece. Type ZSC is used for larger air volume and combined with spiral inlet the ZSC can manage very high material loads with best separation rates.

## The centrifugal separator

The centrifugal separators type ZSA, ZSB and ZSC operate within an air volume range of 100 to 20,000 m<sup>3</sup>/h. Their robust design and protective interior lining ensure a long service life and the highest degree of reliability, safety and availability.

## Application in various industrial sectors

- Textile industry
- Non-woven-industry
- Woodworking industry
- Paper and packaging industry
- Cellulose industry
- Food industry

## Advantages

- No rotating or moving parts, ensuring maintenance free operation
- Easy separation of fine and finest particles
- High separation efficiency
- Continuous operation
- Robust design
- Can be operated with positive or negative pressure
- Reduction of pressure loss through a pressure regain piece in the top portion (ZSB feature with return air plenum only)
- Exact adaptation to any air volume due to an extensive variety of available sizes

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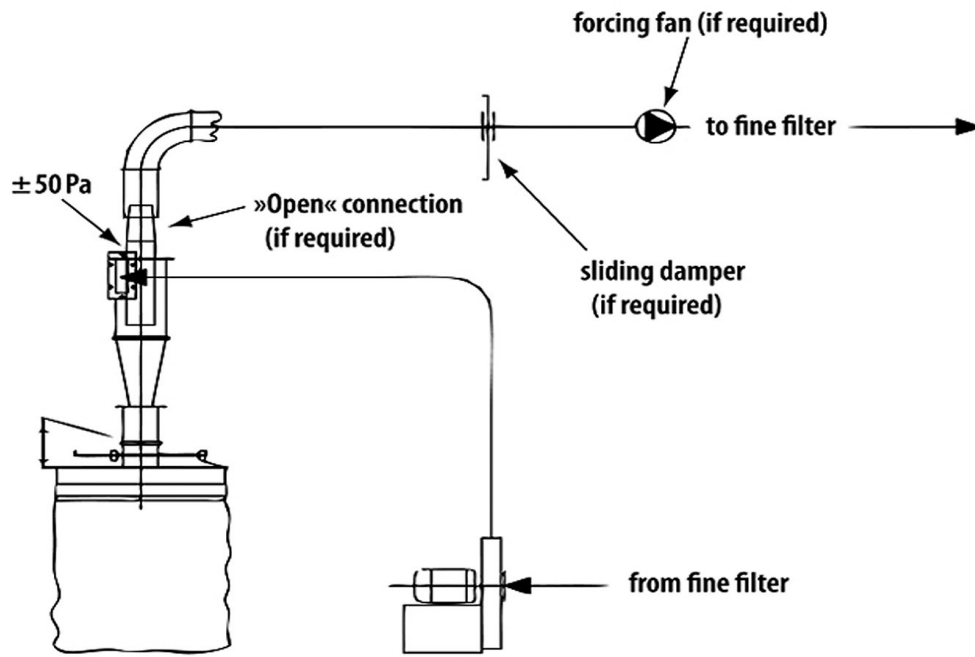
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## Example for application in combination with Drum Filters



## Technical Data

Type	Air volume m <sup>3</sup> /h (cft. / min)	Dust quantity kg/h (lbs/h)	Pressure decrease (Pa)	Typically minimum particle size d50* (microns)
ZSA	300 - 1,000 (175 - 600)	to 50 (to 220)	1,200 - 1600	5-10
ZSB	100 - 1,600 (60 - 950)	to 100 (to 220)	1,200 - 3,000	3-5
ZSB with return air plenum	100 - 1,600 (60 - 950)	to 100 (to 220)	1,200 - 2,500	2-3
ZSC	1,400 - 20,000 (830 - 11,780)	to 1000 (to 2,200)	1,200 - 2,500	5

\*) Min. particle size d50 means that 50% of particles that size will be separated.  
The minimum particle size was determined at maximum nominal volume.