

EUROVAC SPC CYCLONES

EFFICIENT PRE-SEPARATOR FOR INDUSTRIAL DUST EXTRACTION

Eurovac cyclones are mainly used as pre-separators to enhance the performance of main filters and to filter large-sized particles, dusts, shavings and chips.

Cyclones are suitable for a wide range of industrial dust extraction applications and serve as a reliable part of dust extraction and material handling systems.

Eurovac-syklonin toimintakaavio –

1. **Dust-laden air into the cyclone**

The air flow containing dust and particles is directed into the cyclone from the side through the inlet opening.

2. **Rotating air flow**

The air begins to rotate inside the cyclone, forming a strong rotating air flow.

3. **Centrifugal force separates the particles**

The rotating motion generates centrifugal force, which directs the heavier particles against the cyclone walls.

4. **Material settling**

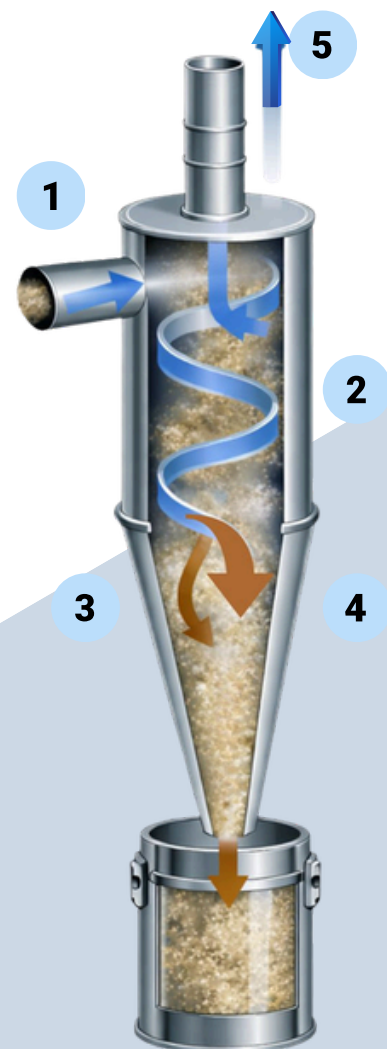
The separated particles and dust travel downwards along the cyclone walls to the lower part of the unit and collect in the collection container.

5. **Cleaned air out**

The cleaned air exits upwards through the centre section of the cyclone via the outlet opening and continues into the dust extraction system or exhaust duct.



Eurovac cyclone as part of an industrial dust extraction system



Applications

Eurovac cyclones are widely used across various industries to separate dust, chips and other particles from the air flow.

Typical applications include:

- wood processing industry
- sawmills and joinery industry
- metal industry
- recycling sector
- process industry
- material handling

The cyclone often also serves as a pre-separator before the actual filtration system or industrial vacuum cleaner.

Advantages of the Eurovac cyclone

- enhances dust extraction
- reduces filter load
- extends service life
- low maintenance requirement
- suitable for high air flows

Material options

Eurovac cyclones can be manufactured from different materials according to the application, such as:

- carbon steel
- wear-resistant steel
- stainless steel
- stainless steel (RST)/AISI

The material selection is made based on the material being handled, wear, and possible corrosive conditions.



The material separated by the cyclone can be collected directly into a bulk bag.

Examples of collection options:



- Drum collection – material is collected directly into a container or drum



- Bulk bag collection (Big Bag) – larger material quantities



- Tipping container – easy emptying for larger quantities



- Screw conveyor – continuous transfer into the process



- Rotary valve – controlled discharge into the system

How to choose the right Eurovac cyclone?

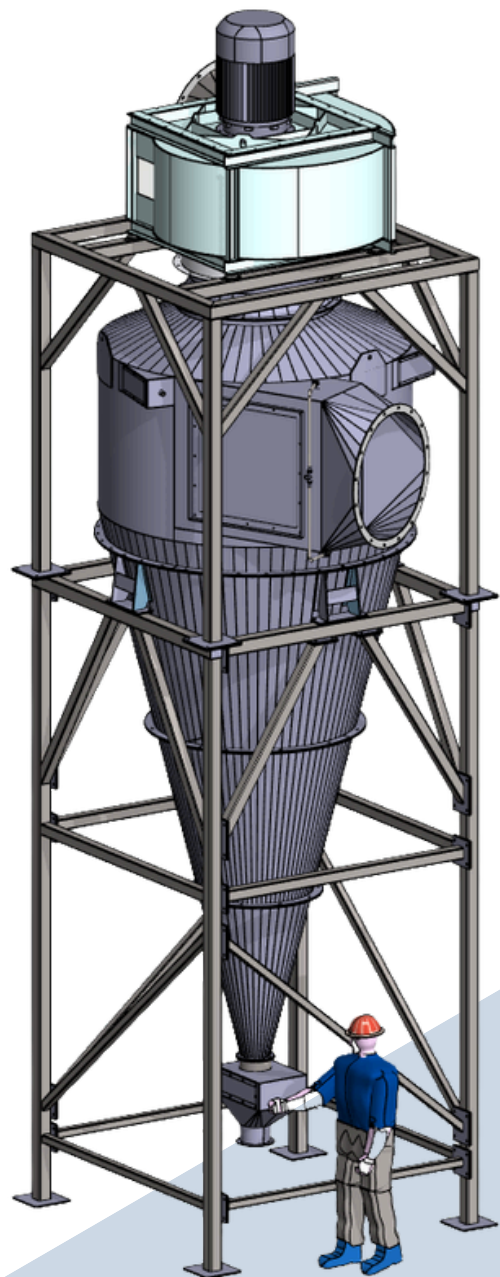
Several factors influence the choice of the right cyclone. The Eurovac cyclone can be dimensioned according to the application and process.

Factors taken into account when selecting a cyclone include:

- air flow rate (m^3/h)
- type of material to be separated
- particle size and material weight
- amount of dust in the process
- installation space and system structure
- collection solution (container, tank or other solution)

If required, Eurovac cyclones can be designed as part of a comprehensive dust extraction system.

Ask for more – we will help you choose the right solution.



Main dimensions and size classes of Eurovac cyclones

Eurovac cyclones are available in several different size classes and models.

Standard-sized Eurovac cyclones cover size classes Eurovac 30–220 (Ø300–Ø2200 mm), with a capacity range of approximately 600–45,000 m³/h.

If required, we also manufacture cyclones outside the standard range, tailored to the customer's needs.

Notes on dimensions

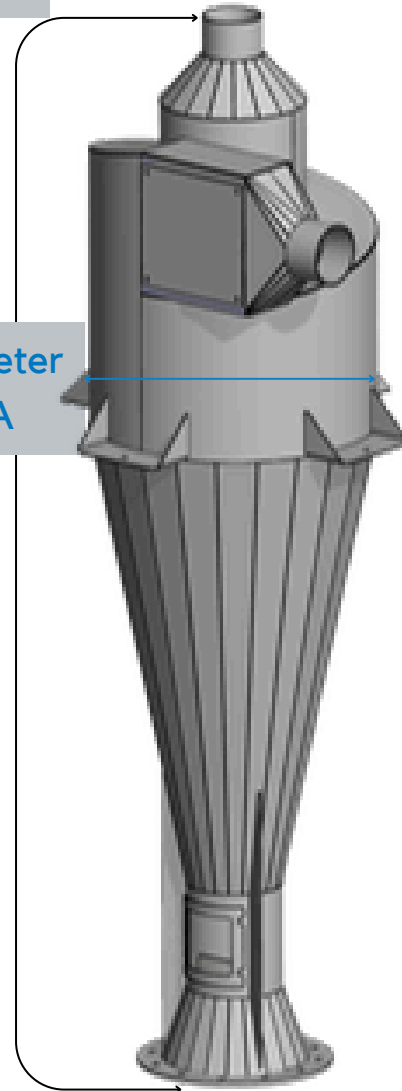
- The dimensions presented are indicative main dimensions.
- Final dimensions are determined by the application and equipment.
- The sizes and positions of the duct connections can be designed according to the application's ductwork.
- We reserve the right to make technical change.

Eurovac cyclone models and dimensioning options:

Main dimensions:
height (**H**) and
diameter (**ØA**)

Height H

Diameter
ØA

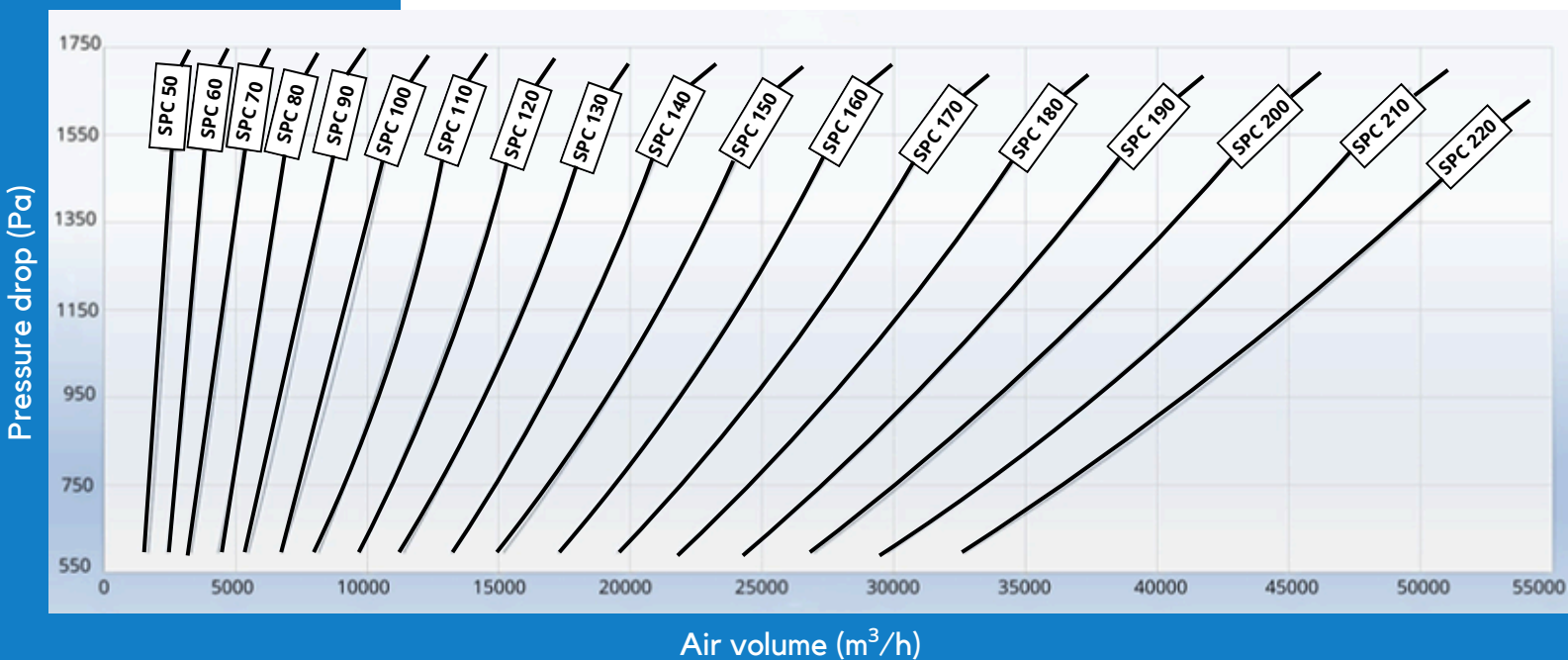


Model	Diameter ØA [mm]	Height H [mm]
Eurovac SPC 50	500	1600
Eurovac SPC 60	600	1900
Eurovac SPC 70	700	2100
Eurovac SPC 80	800	2300
Eurovac SPC 100	1000	3200
Eurovac SPC 120	1200	3800
Eurovac SPC 130	1300	4200
Eurovac SPC 140	1400	4200
Eurovac SPC 160	1600	5500
Eurovac SPC 180	1800	5600
Eurovac SPC 220	2200	5800

EUROVAC SPC CYCLONES

Performance in different operating situations

PRESSURE DROP



SEPARATION EFFICIENCY E (D)

