

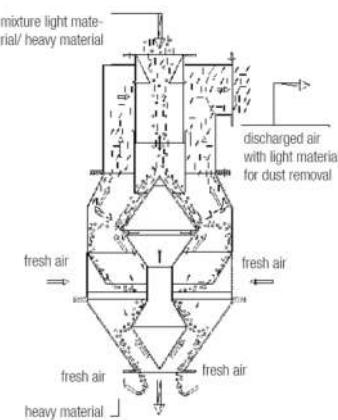
Standard air cone separator

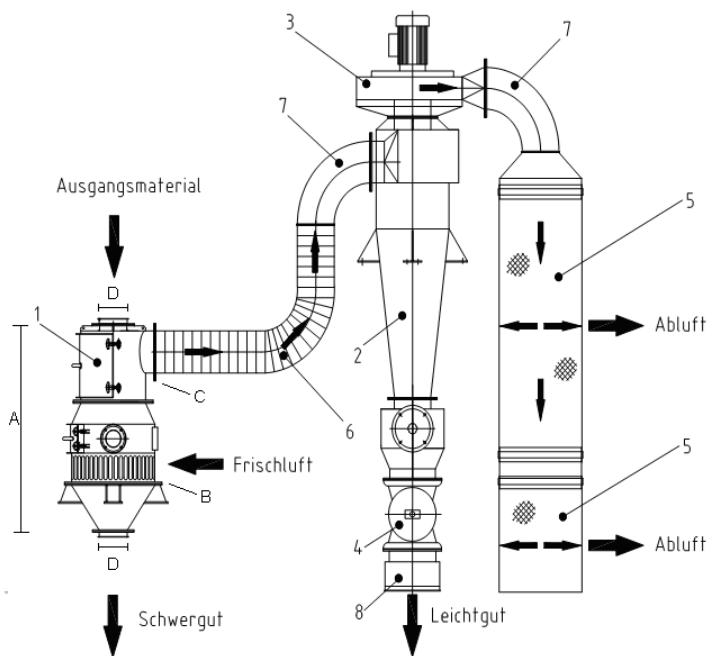
The JÖST Circulating Air Cone Separator plant is designed for the material separation of heavy and light material up to 80 mm. During the filling procedure the product mixture is introduced centrally and is evenly distributed over the entire width of the separator via a top inlet, until it reaches the separation zone. Via multiple cross-flow separation procedure the light material is extracted out of the product mixture. Heavy material falls through the rising air flow and is released at the separator base. Light material is discharged together with the air at the upper part of the separator. Finally it is transported over a grade pipeline to a cyclone. The interior operational space of the separator is designed in a special way so that there are no disturbances in the created air streams between the floating and raising light material and gravitational falling heavy material. The light material is steadily separated at a high throughput rate. During the operation of the air cone separator the total air supply is fed as filtered air and is released as discharged air behind the separator. The air supply and regulation is made through the exhaust air fan as a single ventilator in the system (suction mode).

Properties of the circulating air cone separator:



- + Several separation steps (3-5) are possible
- + Optimal product distribution over the whole separation width via a special feeding/ distribution system
- + Very precise separation results due to a combination of a multiple cross-flow-and counter-flow separation
- + Easy accessibility and cleaning possibilities through inspection flap
- + Visual supervision by the aid of separation viewing window
- + Heavy duty construction




Plant construction:

1. Standard air cone separator
2. Cyclon with sedimentation
3. Centrifugal fan
4. Rotary gate valve
5. Dust bag
6. Flexible pipe connection
7. Pipe elbow
8. Bag connection with protecting fences

Accessories:

- Inlet and dosing system
- Light fraction separator system
- Heavy product stream outlet system
- Ventilator technique
- Control and sensor technology
- Frame with staging and ladder

Note:

Complete separator plants from planning up to the commissioning

Technical data (all values are approximate):

Type	A x B x C [mm] *	Air Volume [m³/h] ^{1*)}	Throughput [t/h] ^{2*)}	Inst. power [kW]
KS 300 ^{3*)}	600 x 300 x 150 x 100	500 - 1000	< 0,75	< 2,2
KS 500 ^{4*)}	1000 x 500 x 200 x 150	1000 - 2000	0,75 - 2,5	2,2 - 4,0
KS 750 ^{4*)}	1500 x 750 x 300 x 250	2000 - 4000	1,5 - 5,0	4,0 - 7,5
KS 1000 ^{5*)}	2000 x 1000 x 400 x 300	4000 - 8000	3,0 - 10,0	7,5 - 15
KS 1500 ^{5*)}	3000 x 1500 x 600 x 450	8000 - 16000	6,0 - 20,0	15 - 30

1* The throughput (product volume flow refers to combustibles with a bulk density of about 100 kg/m³)

2* Mass flow depends on product

3* Only applicable for dust removal of free flowing products. Construction differs partly.

4* To reduce the air exhaust at the inlet area we use an inlet guiding cone for free flowing products. For limited free flowing products an inlet system like e.g. rotary gate valve has to be used at the inlet area.

5* Feeding system (for example rotary gate valve) for separator is necessary