

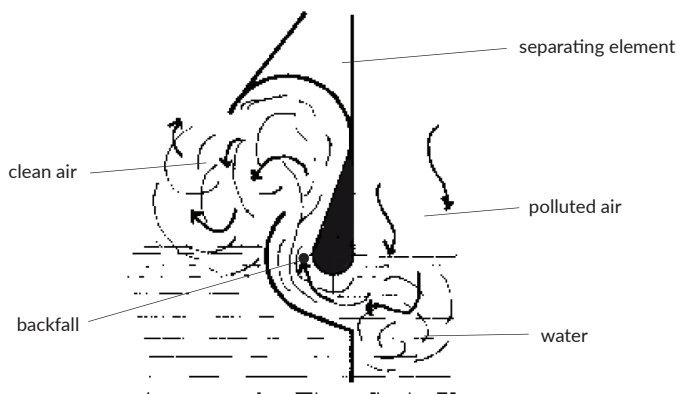
WET-5000 – wet separator



Purpose

Wet separators WET-5000 are designed for cleaning the dusty air from impurities, arising during the production processes. They are perfect at capturing the dry dust, humid dust, viscous substances as well as dust with large amount of sparks, arising during various production activities as grinding and other processes in chemical-, pharmaceutical industry, food production.

Function



WET-5000 wet separator works on the basis of a humid filtration, within the vacuum part of the installation, (i.e. at the suction side of the fan). The polluted air, while passing through the set of guide plates in the water (backfall), is getting mixed with the water, creating the aerated „dust-water” mixture. The particles which are captured in the separator, create sludge that sediments in the waste funnel. It is important to empty the sludge through a drainage valve. When the air passes the backfall, it gets additionally cleaned from the rest of water particles in the outdropping device. The water level is controlled by a minimum-maximum water level probe.

Structure

The device consists of following elements:

- mixing chamber – there are guide plates making whirls of dust mixture and water,
- hopper – to collect the waste of filtration,
- drainage valve for sludge,
- fan chamber with a fan,
- system to control water level and water re-fill state in the mixing chamber,
- control unit.

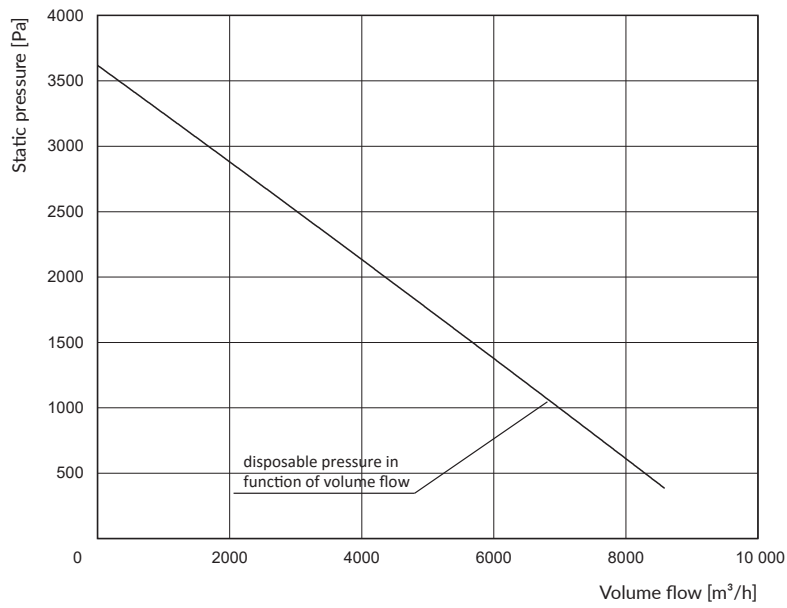
The device is equipped with a fan chamber, which is directly placed on the mixing chamber and contains a radial fan. In front of the fan is an outdropping unit, to separate the air of water drops (dewatering). First connect the device with the water supply system. Install the control unit in a place convenient for User and connect with the dust separator.

When the sludge is removed from the drainage valve, the water in the mixing chamber is systematically refilled automatically.

NOTE:

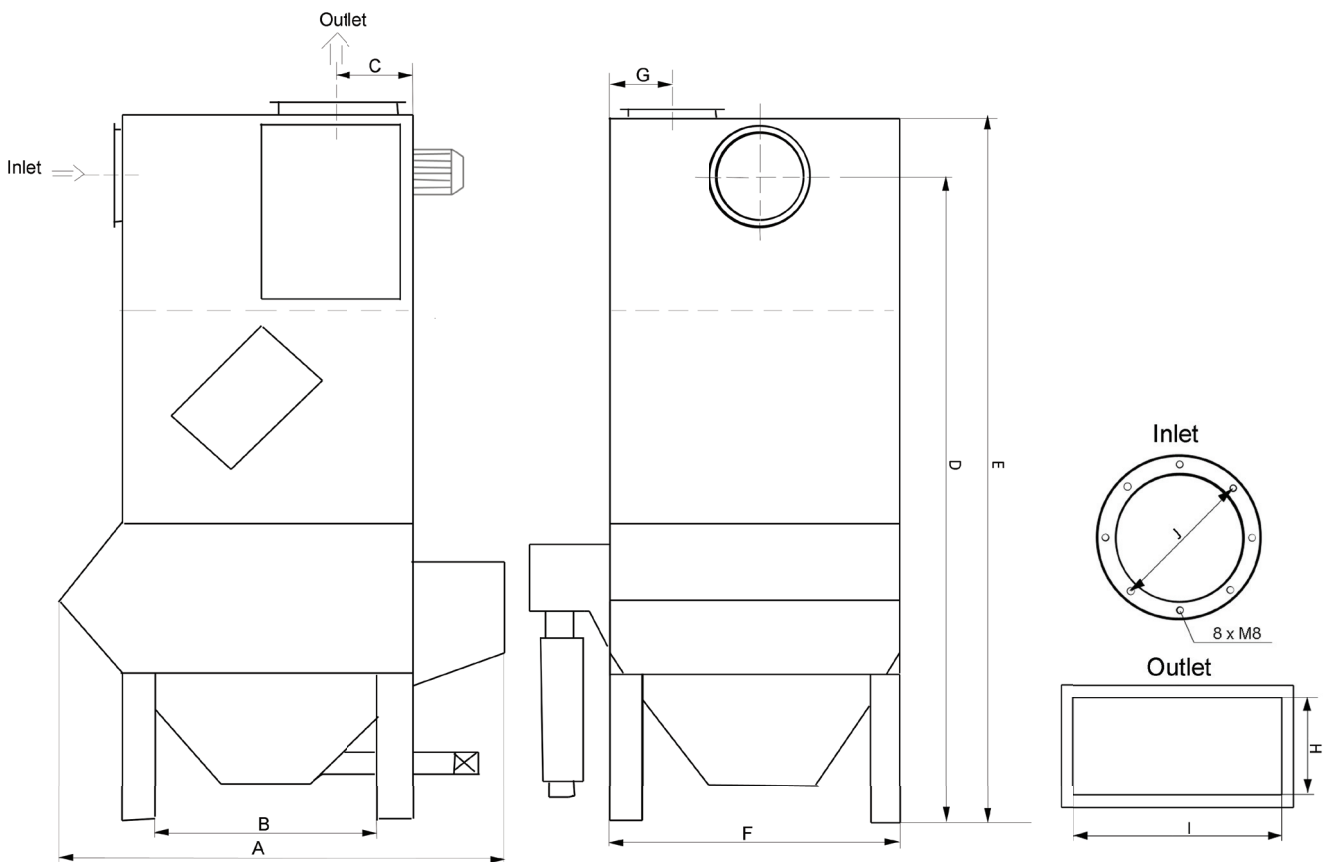
1. On demand of Customer we produce separators o volume flows 10 000 and 15 000 m³/h.
2. On demand of Customer the separator can be equipped with an automatic sludge remover.

Flow charts



Technical data

Type	Part no.	Maximum volume flow [m³/h]	Maximum vacuum [Pa]	Supply voltage [V]	Motor rate [kW]	Acoustic pressure level [dB(A)] from a distance of:		Capacity of the water chamber [m³]	Weight [kg]
						1 m	5 m		
WET-5000	804U11	8570	3800	3x400	11	78	65	1,1	1400



Dimensions

A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]	H [mm]	I [mm]	J [mm]
2125	1260	200	2560	2810	1210	245	285	405	Ø345