

MISTOL – filtering unit with HEPA-Filter



MISTOL-1000



MISTOL-2000



MISTOL-5000

Purpose

MISTOL oil mist separators are intended for cleaning the air from the oil mist, arising during various manufacturing processes. Especially, they are recommended for removal of oil particles from the vapours of the cooling-lubricating liquid, used in metal machining (e.g. processing on lathe, milling, drilling). Separators are manufactured in three sizes varying in efficiency: MISTOL-1000, MISTOL-2000 and MISTOL-5000.

Structure

MISTOL separator consists of:

- housing of steel sheet,
- radial fan – housing of cast aluminium,
- pre-filter,
- high-efficiency HEPA filter – class H13,
- sedimentation chamber – equipped with connection fittings for the oil laden air,
- silencer at the fan outlet,
- motor protective switch – short-circuit- and overload protection,
- supporting construction (for MISTOL-1000 and MISTOL-2000 the supporting construction is additional equipment),
- oil drainage valve.

As first stage, the polluted air is submit to pre-filter cleaning, subsequently it streams through the HEPA filter (filtration medium non-hygroscopic cardboard of glass-fibre). The separated oil is draining into the oil sedimentation chamber. Underneath the chamber is located an oil drainage valve to discharge the accumulated oil from the chamber, further into a container placed under the device.

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: | | Weight [kg] |
|-------------|----------|----------------------------|---------------------|--------------------|-----------------|---|------|-------------|
| | | | | | | 1 m | 5 m | |
| MISTOL-1000 | 800S07 | 1750 | 1700 | 230 | 0,75 | 69 | 64,5 | 100 |
| MISTOL-2000 | 800S08 | 3100 | 2000 | 230 | 1,5 | 73,5 | 68 | 130 |
| MISTOL-5000 | 800S09 | 8300 | 4200 | 3x400 | 5,5 | 77 | 71 | 400 |

Operational use

MISTOL-1000 and MISTOL-2000 should be placed on a supporting construction (additional equipment of the device). User can construct a supporting frame on one's own, suitable for installing the separator at the requested height (in this case there is no need to buy a supporting construction). This situation exists when User requests to direct the collected oil (from the sedimentation chamber) directly into the container of the processing machine. As standard, there are three locations of the air inlets in the device. User can choose the most convenient inlet location – at the back- or on the side walls of the device. Additionally, it is possible to change the location of the air outlet of the fan. Simply, by turning the fan on the suction connection flange or by turning the silencer on the fan outlet.

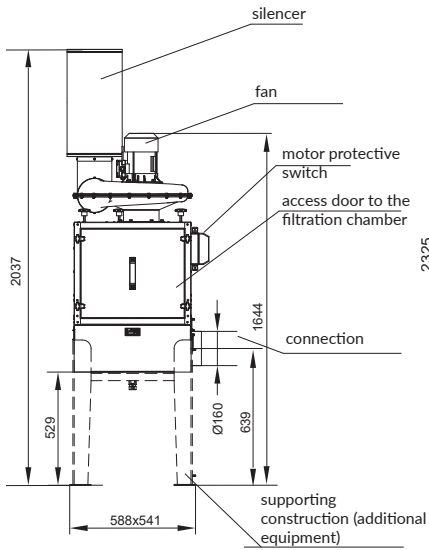
In the course of operational use, separators do not need continuous supervision, except switching ON and OFF. The HEPA high-efficiency filter ought to be replaced at the moment when the flow efficiency decreases, (but usually they can work even throughout several years without replacement).

The everyday maintenance consists in emptying the sedimentation chamber from the deposited oil, by opening the drainage valve. Put a suitable container underneath the device, or the accumulated oil should be drained directly into the container of the processing machine.

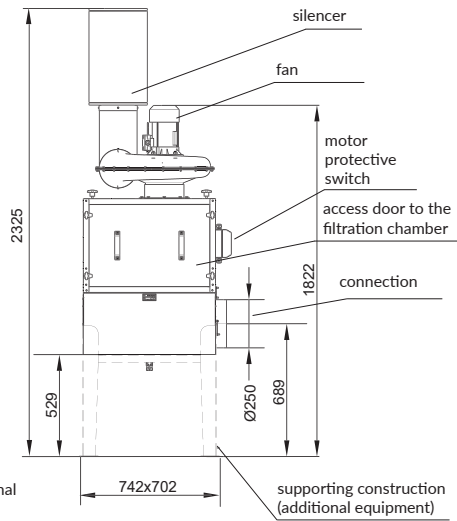
The device is not designed for continuous day and night operation, as the filter must have enough time to drain off the excessive oil amount. As estimation, the oil drainage time is 4–8 hours.

MISTOL

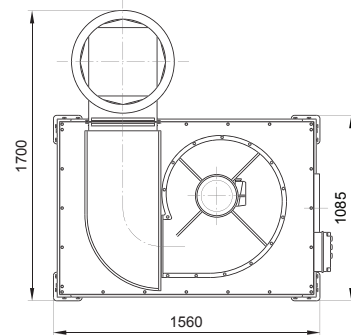
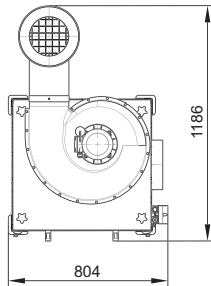
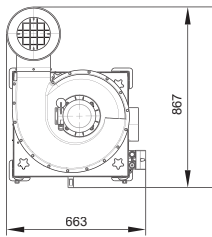
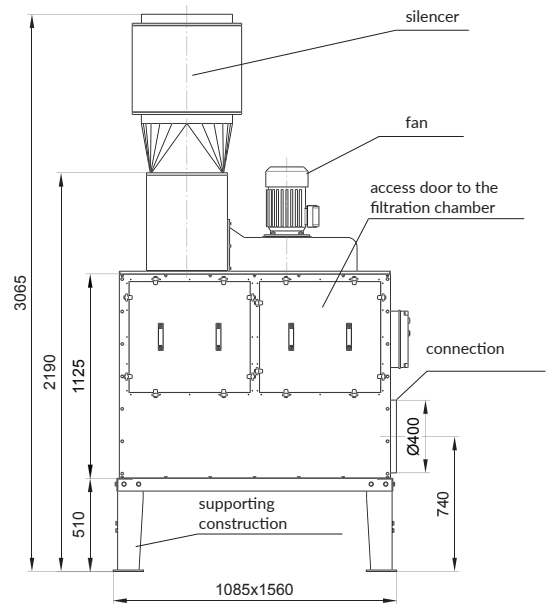
MISTOL-1000



MISTOL-2000

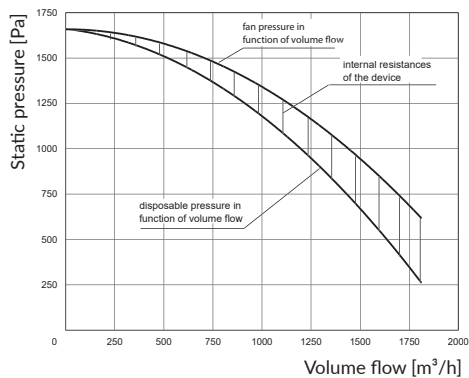


MISTOL-5000

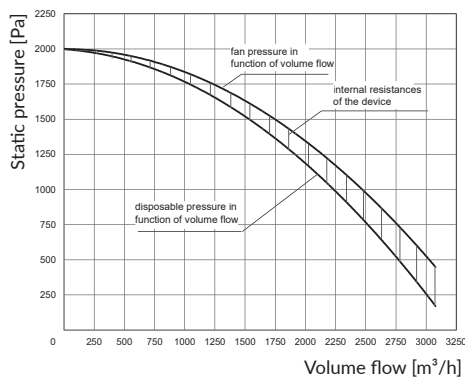


Flow charts

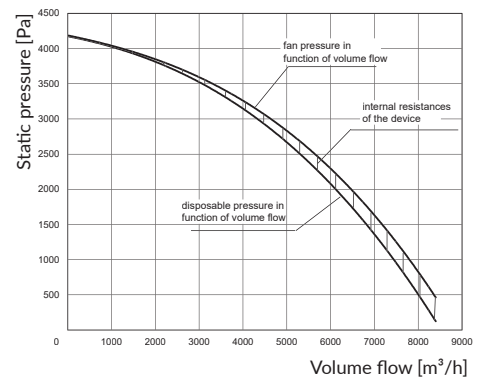
MISTOL-1000



MISTOL-2000

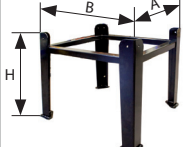


MISTOL-5000



Additional equipment

Supporting construction

|  | Type | Part no. | Dimensions AxBxH [mm] | Weight [kg] | Purpose |
|--|----------------|----------|-----------------------|-------------|-------------|
| | KW-MISTOL-1000 | 841K50 | 511x558x630 | 18 | MISTOL-1000 |
| | KW-MISTOL-2000 | 841K51 | 704x662x625 | 20 | MISTOL-2000 |

NOTE: In separator MISTOL-5000 supporting construction is regarded as standard equipment.