## The secret behind a complete filter system



Pre filter

Filter class F8

Particle filter

HEPA class H13

Gas filter 5 activated carbon

Filter efficiency 99,96 %

Filter efficiency 95 %

Everything interacts in a filter system. A 3-stage filter is the optimal solution for cleaning the air from pollution that occurs around operators.

The right airflow needs to be used to separate particles and gases.

The airflow and the position of the nozzle determine the capturing area, but it also needs to have the right airflow through the gas filter for best protection.

## PRE FILTER

The pre filter catches big particles and prolongs the lifetime of the main filter. Filter quality F8 for maximum efficiency of pre filter.

## PARTICLE FILTER

It is important that the particle filter captures small particles (0,1 - 0,3 micrometer) these are most hazardous to health. To protect operators and to meet demands and legislations, the HEPA quality needs to be H12 or more.





The MG140 is equipped with a HEPA class H13 filter, and the separation degree is 99,96 % of particles in size 0,1 - 0,3 micrometer.

## GAS FILTER

3 things is necessary for protecting the operators from hazardous gases

1. Amount of gas filter media The amount of needed gas filter media depends on the airflow.

MG140 includes 5 kg gas filter media.

2. Dwell time, contact time

It is important to get the right contact time, between gases and the gas filter media, otherwise the gases will pass the filter and back into the room. Recommended contact time is is 0.25-0.30 seconds.

3. Particles after particle filter

It is important that the particles stay in the particle filter otherwise the gas filter will be used up by particles and not by gases.



The sound level of the filter system depends on the blower.