

# Aerosol, oil mist and oil smoke filters

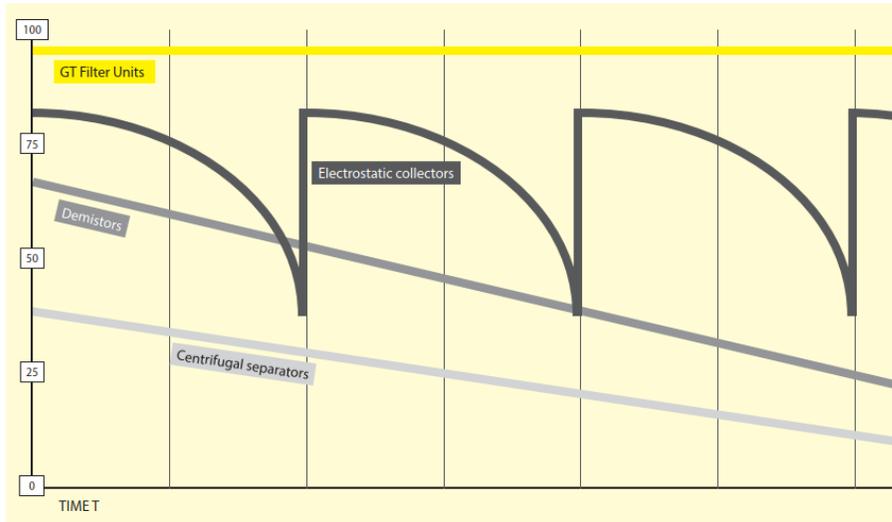
**NEXT GENERATION**



# Maintenance-free aerosol, oil mist and oil smoke filters



## NEXT GENERATION



**Application:** Hardening shops, processing machines, hall air purification, etc.

Drainage – filter cell technology with

- + **Maximum separation efficiency of 99.97%**
- + **Unique service life** and
- + **Low energy demand!**
- + Recirculating air operation possible for all systems
- + Adjustment to particle size for each application [ $\mu\text{m}$ ]
- + Permanently clean systems + hall air
- + Recirculation of separated oil possible
- + High fire protection effectiveness
- + Summer-/winter operation mode optional

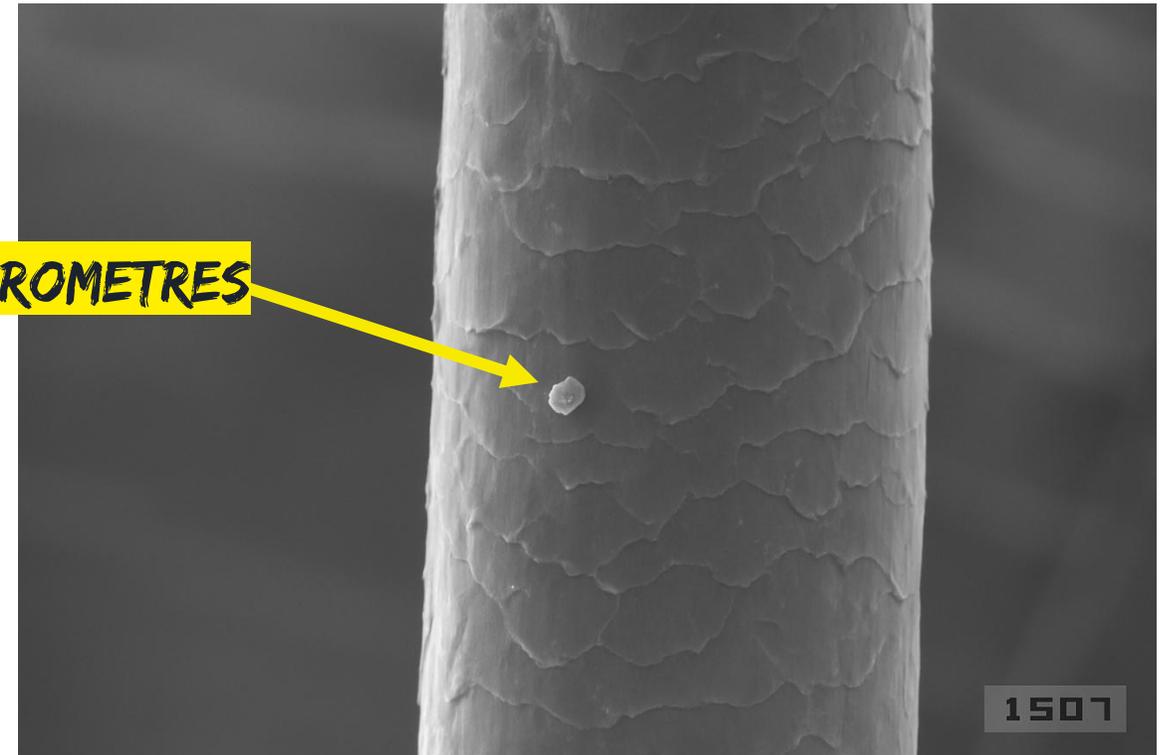
**CLEAN & SAFE WORKPLACES**

# Serious consideration of requirements

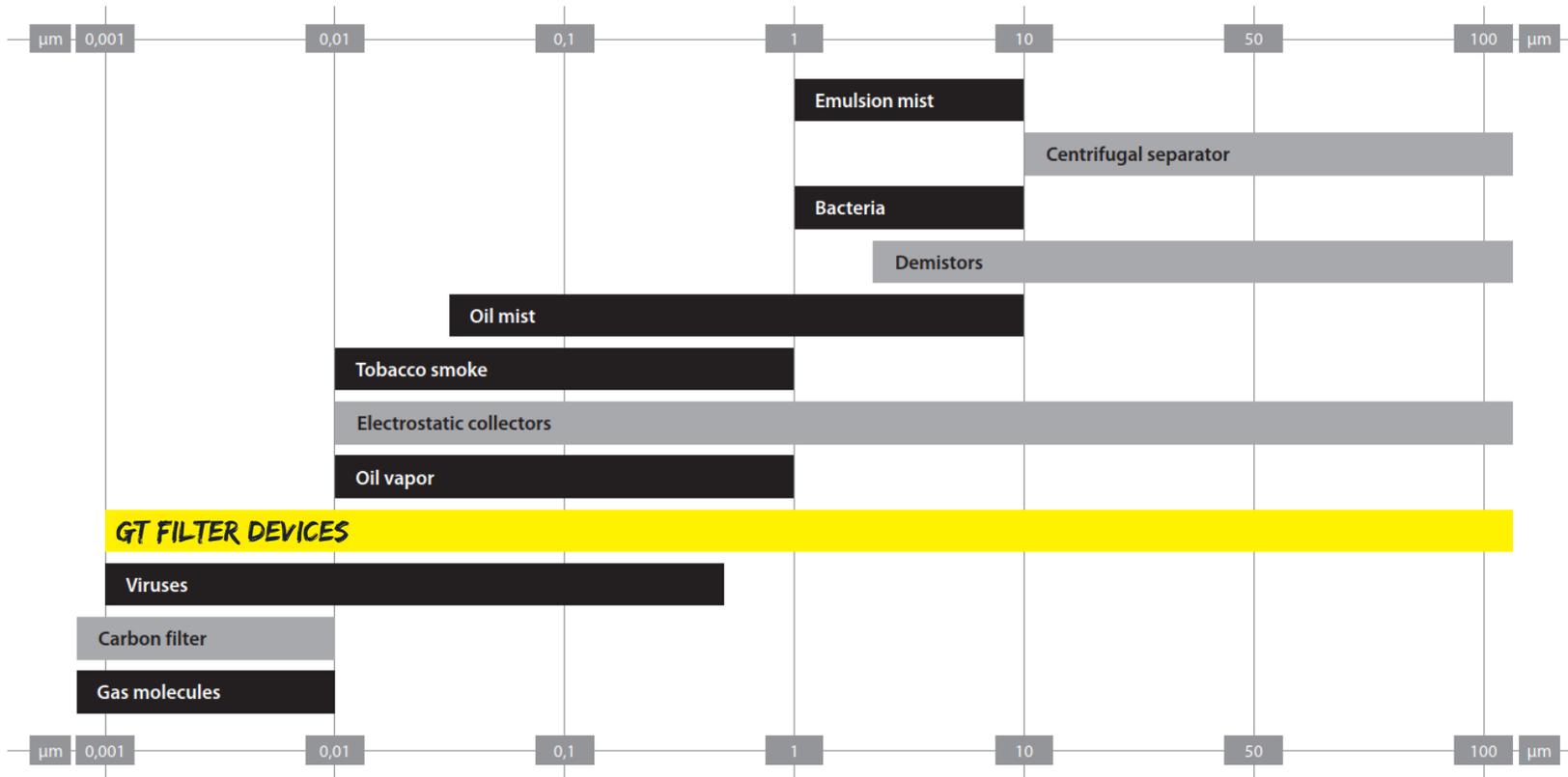
Selection of the appropriate filter matching to the individual **application and particle size**

**PARTICLES ON HAIR 0.3 MICROMETRES**

Type	Particle size
Oil smoke	<1.0 $\mu\text{m}$
Oil mist	1.0-10.0 $\mu\text{m}$
Spray mist	> 10.0 $\mu\text{m}$



# Particle sizes in industry/environment and efficiency of filter types



## PARTIKEL | ENVIRONMENT

- 1-10 µm Bacteria
- 0.01-1 µm Tobacco smoke
- 0.002-0.5 µm Viruses

## PARTIKEL | INDUSTRY

- 1-10 µm Emulsion mist
- 0.05-10 µm Oil mist
- 0.01-1 µm Oil vapor

## PROPERTIES

- < 10 µm Can enter respiratory tract
- < 3 µm Can enter lungs
- < 1 µm Can enter blood

# Aerosol, oil mist and oil smoke filters

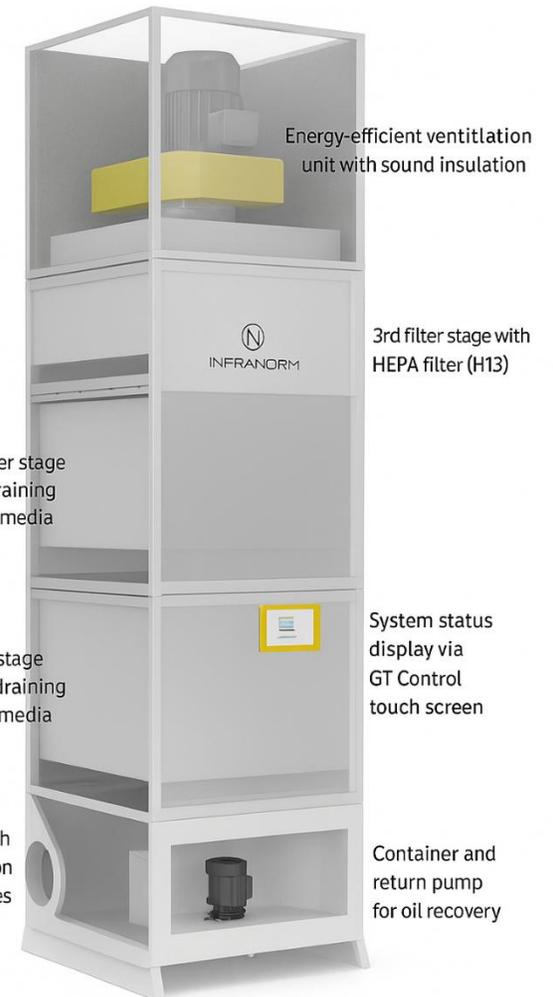


**0.03%** of emissions pass through the third filter stage

**1.4%** of emissions remain after the second filter stage

**20%** of emissions remain after the first filter stage

**100%** of oil mist particles enter the filter



# Improved fibreglass drainage technology



## **LONGEST LIVETIME OF ANY DEVICE ON THE MARKET**

- + Long filter service life
- + Minimal maintenance requirements
- + Highest reliability
  
- + Adaptation of filter fabrics to different applications and particle sizes
- + Additional filter cartridges for special applications, including heavy-duty applications

# The right solution for every application



**AEROSOL, OIL MIST**



**+**  
Tailor-made & turnkey complete systems  
**+ TURNKEY**

**OIL SMOKE**



**+**  
Customised & turnkey complete systems  
**+ TURNKEY**

# Energy efficiency + Industry 4.0



## ENERGY-EFFICIENT MOTORS

### CONTINUOUS FAN CONTROL POSSIBLE WITHOUT FREQUENCY CONVERTER

- + Highest separation efficiency of 99.97%
- + Cost savings due to elimination of throttle valves in the piping

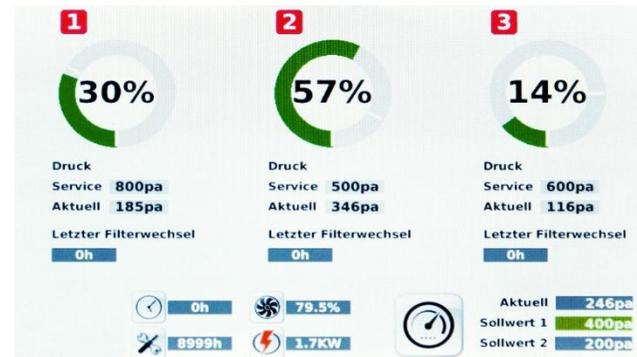
### INDUSTRY 4.0 READY

- + Communication via Modbus → can be integrated into master control systems (WAGO, Logo, etc.)
- + Wide range of interfaces & communication with SQL database possible\*
- + Easy setup of a start-stop signal
- + Output of an alarm signal for remote maintenance\*

\* Available on selected models

# Condition monitoring

## Simple and clear



### TOUCH DISPLAY

- + With electronic pressure gauge

### OPERATING HOURS COUNTER

- + Report of current operating hours

### SIGNALIZATION OF CURRENT FILTER CONDITION

- + Indicates when the filter material needs to be replaced
- + Simple, quick status monitoring, even by untrained personnel



# Your advantages



## HIGH SEPARATION EFFICIENCY

- + Clean hall air and equipment
- + Improved working conditions for your employees

## MAINTENANCE-FREE WITH A GUARANTEED SERVICE LIFE OF 1 YEAR

- + Lower personnel expenses
- + Low maintenance costs

## LOW ENERGY DEMAND

- + Reduction in energy costs

## VISUAL STATUS INDICATOR

- + Touch display with clear status display, quick status monitoring, even by untrained personnel

**CONVINCE YOURSELF WITH A FREE TEST DEVICE!**

# Excerpt from references

