

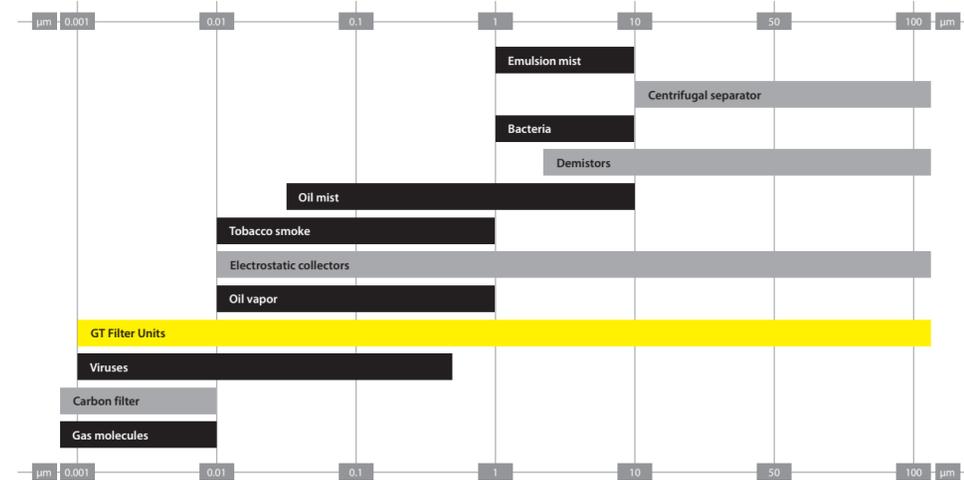
## EVERY WORKPLACE PRODUCES ITS OWN AIR POLLUTION

### Particle size, particle type, number of particles and volume of air to be filtered

Air filter devices must guarantee the permanent, effective filtration of waste air for every specific form of pollution resulting from a work process such as machining, reshaping or grinding. Measurably cost-effective and efficient. Reduced quantities of cooling lubricant and increasing IC pressures yield finer atomization and smaller particles. The parameters of particle size, type of particle, number of particles and volume of air to be filtered are crucial factors when selecting the correct air filter system.

Particle   Industry	Properties	Particle   Environment
Emulsion mist 10–1 µm	Can enter respiratory tract < 10 µm	Bacteria 10–1 µm
Oil mist 10–0.05 µm	Can enter lungs < 3 µm	Tobacco smoke 1–0.01 µm
Oil vapor 1–0.01 µm	Can enter blood < 1 µm	Viruses 0.5–0.002 µm

### Particle sizes in industry and environment | Separation efficiency of filter types



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## GT AIR FILTER DEVICE

for light and heavy air pollution caused by oil, soluble oils and general cooling lubricants

### Areas of application of the air filter devices GT Light and GT Heavy

All lines of work in which harmful substances are released in the form of gases, steams, mists and smoke during production processes and cannot be avoided due to the type of process involved. These processes include machining, reshaping, grinding and heat treatment.

**L** **H**  
LIGHT HEAVY

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*The quality of a product is directly correlated to the quality of the workplace. If employees know that their health is being safeguarded in the workplace, their level of satisfaction increases. Downtime is reduced, productivity increases, the quality of the product improves and is assured.*

## IT IS IMPORTANT TO HAVE CLEAN AIR IN THE WORKPLACE. CLEAN AIR, ABOVE ALL

### Innovative air filter devices for the effective, long-term filtration of waste air

During the production process, filtration devices are expected to fulfill complex requirements in terms of process reliability, product quality and safety in the workplace and are adapted to the specific features, the production technologies used and the individual operating conditions. In terms of their design, function and performance, the innovative GT air filter devices - GT Light and GT Heavy - stand for lasting, efficient and cost-effective waste air filtration. They require virtually no maintenance and have a guaranteed separation capacity in terms of space and time.

#### LOW-LEVEL POLLUTION

**L**iquid and solid particles in the aerosol range. Particle sizes measuring between 1 and 10 µm. Visible on dispersion. Occurs when using cooling lubricants containing pure oil and soluble oils (coolants).

Occurs at moderate machining speeds and with low pressure of cooling lubricants.

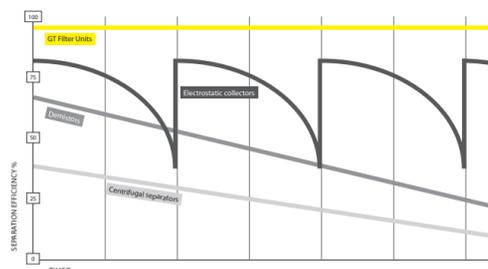
#### HEAVY POLLUTION

**H**liquid and solid particles in the aerosol range. Particle sizes measuring between 0.01 and 10 µm. Visible on dispersion. Occurs when using cooling lubricants containing pure oil and soluble oils (coolants).

Occurs in the event of high cutting speeds and/or with high pressure of cooling lubricants.

Carrying out a measurement is a vital process in reaching the correct decision

$$STNV^3 = R$$



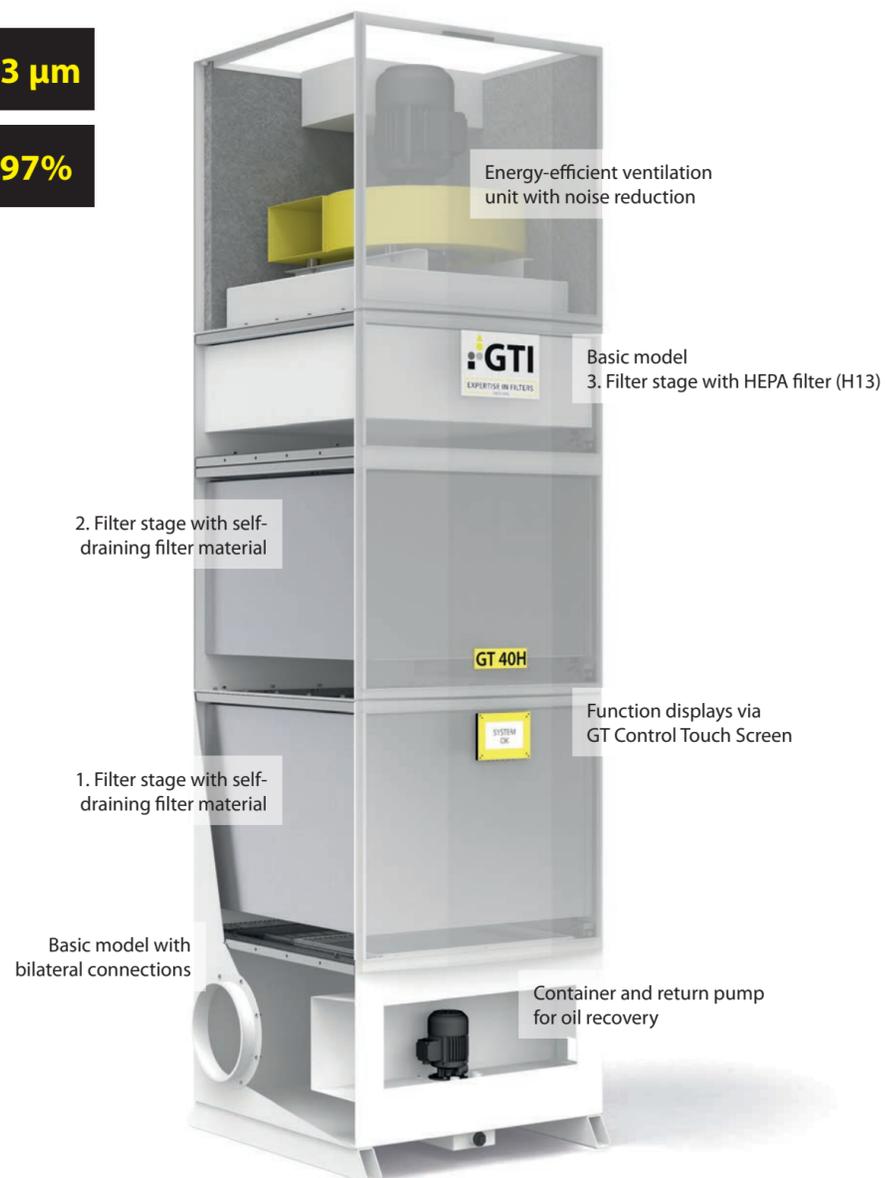
S = size of particle  
T = type of particle  
N = number of particles  
V<sup>3</sup> = volume  
R = result



## PEOPLE CREATE SOLUTIONS. TECHNOLOGY WORKS

≥ 0.3 µm

99.97%



### GT LIGHT

	GT 5L	GT 10L	GT 20L	GT 40L	GT 80L
Nominal volume flow in m <sup>3</sup> /h	500	1000	2000	4000	8000
Power in kW max.	0.5	0.5	2.2	3.7	7.5
Storage space in m <sup>2</sup>	0.34	1.02	0.54	1.02	2.23
Weight in kg	85	170	202	355	750
Total filter surface in m <sup>2</sup>	14.5	25.2/42.3*	31.7/55.1*	63.4/110.2*	126.8/220.4*
Air connection NW in mm	125	160	200	315	400
Ø oil drain "	R 1 ¼	R 1 ¼	R 1 ¼	R 1 ¼	G ¾

### GT HEAVY

	GT 5H	GT 10H	GT 20H	GT 40H	GT 80H
Nominal volume flow in m <sup>3</sup> /h	500	1000	2000	4000	8000
Power in kW max.	0.36	1.15	2.2	5.5/7.5*	11/15*
Storage space in m <sup>2</sup>	0.51	0.72	0.68	1.34	2.49
Weight in kg	109	200	300	930	1750
Total filter surface in m <sup>2</sup>	13.0	24.6	40.5/53.0*	105.7/127.1*	211.4/254.2*
Air connection NW in mm	125	160	200	315	400
Ø oil drain "	R 1 ¼	R 1 ¼	R 1 ¼	G ¾	G ¾

#### Accessories | Options | Installation plans

Detailed technical information relating to the individual models forms part of tailor-made offers for standard and turnkey solutions. Subject to technical modifications. As of 08/2016.

\* depends on application