OIL MIST SEPARATOR TYPE OUK

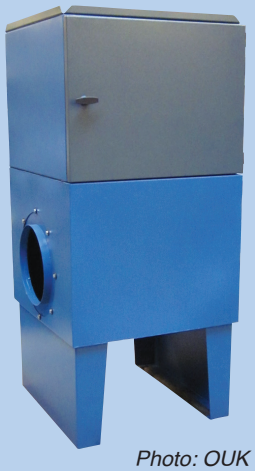


Photo: OUK 4000M7

Photo: OUK 12000 with monitoring from Minihelic-differential pressure manometer

Multistage oil mist filter for separating oil mist aerosols in process air from processing machines, where cooling lubricants are used. Can be used as central filter unit for several machines. On the individual machine the pre-separator of the type OUF should be mounted to limit oil in piping up to OUK.

At oil mist filtration through OUK the emission is normally < 1mg/m³, and emission limit values for oil mist aerosoles are thus met.

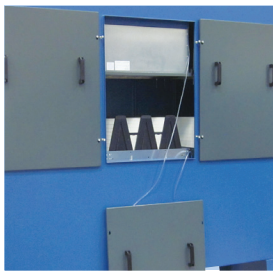
Air volume:	Up to 16,000m³/h
Vacuum:	Up to 5,000Pa
Filter area:	Pre-filter: 0.5 - 2m² F9: 19-76m² Option: H13
Filtration efficiency:	F9
Filtr. eff. with HEPA-filter:	H13

Description

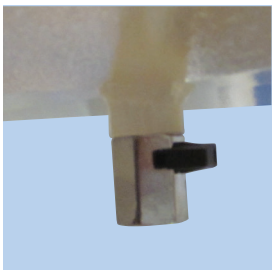
- Process air max. +25°C is led in through inlet connection at the buttom in side of OUK
- Separation occurs through 3 steps:
  1. Speed reduction
  2. Pre-sepaation in washable grease filter (pore filter 35)
  3. Fine filtration in compact filter F9
- Option for HEPA filter (H13) - filter step 4
- Separated oil is collected in bottom of OUK. Bottom is equipped with drain cock.
- Clean air is led out through outlet connection in top.

Easy connection and operation:
Oil mist filter OUK is placed on the floor with the included 400mm ben or mounted on wall with Flex-mountings. Inlet connection is as standard placed in the left side, but can easily be moved to the left side. Separated oil/cooling lubricant is easily tapped by cock in bottom.

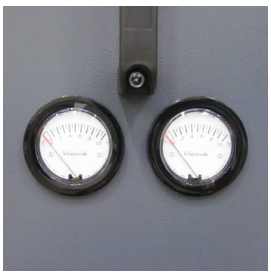
Inlet connection can optional be placed right/left
Inlet connection is tandard mounted in left side, but can easily be moved to the right.



Filter replacement by front door
Filter replacement can be performed through front door.



Bottom is easily drained for oil
Separated oil is removed by ½" drain cock.



Differential pressure drop over filters
For easy monitoring of filter soiling Minihelic differential pressure manometer can be built into front door of OUK (number dependent on size).

Filter monitoring: Continuous monitoring must be kept with pressure drop above filters for timely replacement of these. For this Minihelic-differential pressure manometer can be mounted in front door of OUK or filter guard type L1.

Filter material:

Standard	Material	Filtration efficiency
Pre-separation in grease filter (filter step 2)	Pore filter 35 open-celled polyurethane foam (washable) mounted in aluminium frame 495x495x50mm	Up to 85%
Fine filtration in compact filter* (filter step 3)	Synthetic/polypropylene filter material mounted in plastic frame 592x592x290mm with burst protection grid on clean air side	> 95% corresponding to filter class F9 according to DS EN779 - ePM1 85% according to ISO 16890
Fine filtration through HEPA-absolute filter (filter step 4)	HS-Mikro SFV High Effeciency Particular Air filter, micro-filter (glass fiber) mounted in metal frame 610x610x292mm	> 99,95% corresponding to filter class H13 according to DS EN1822

**Please, note:*
If oil or cooling lubricant contain boric acid, the fine filter must be mounted in galvanized steel frame! Also joints and sealings must be changed (08 291 705).

Photo: Pore filter 35

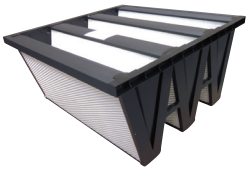


Photo: Compact filters F9

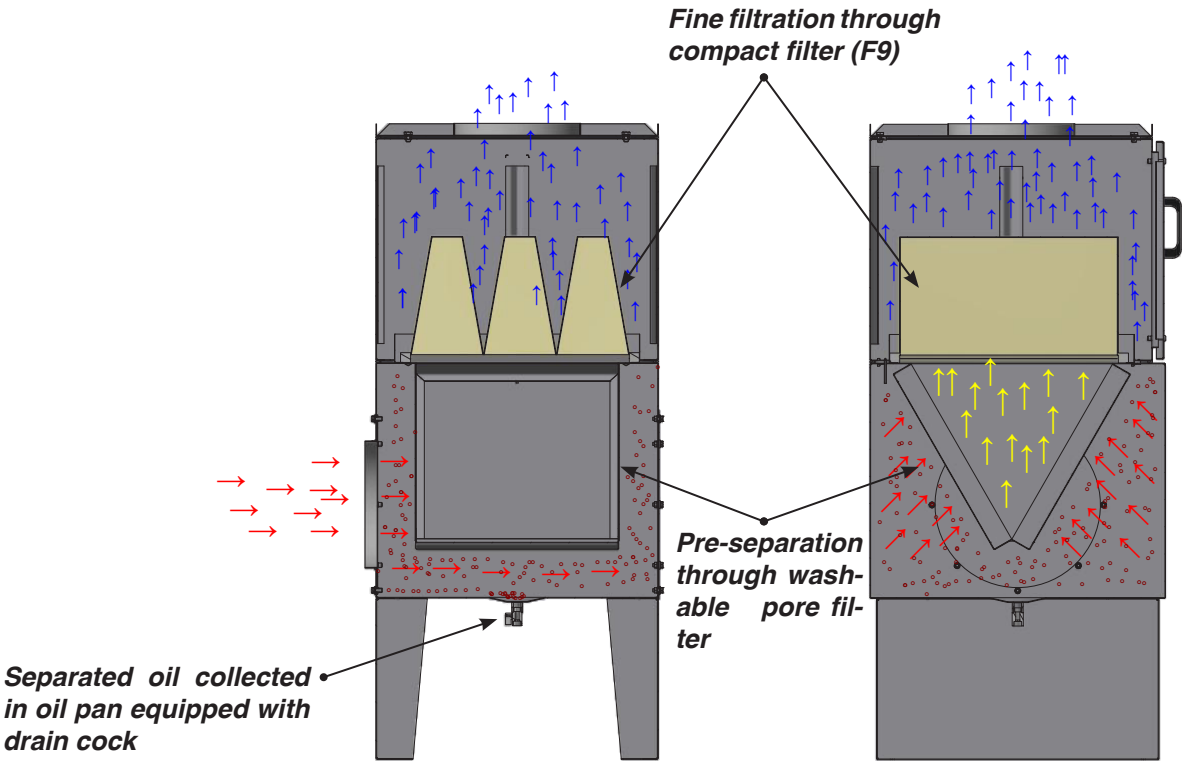
Photo: HEPA-filters

Photo above:
Oil mist filter type OUK is also available with additional filter steps through HEPA-absolute filter (above). Compact filter visible below.

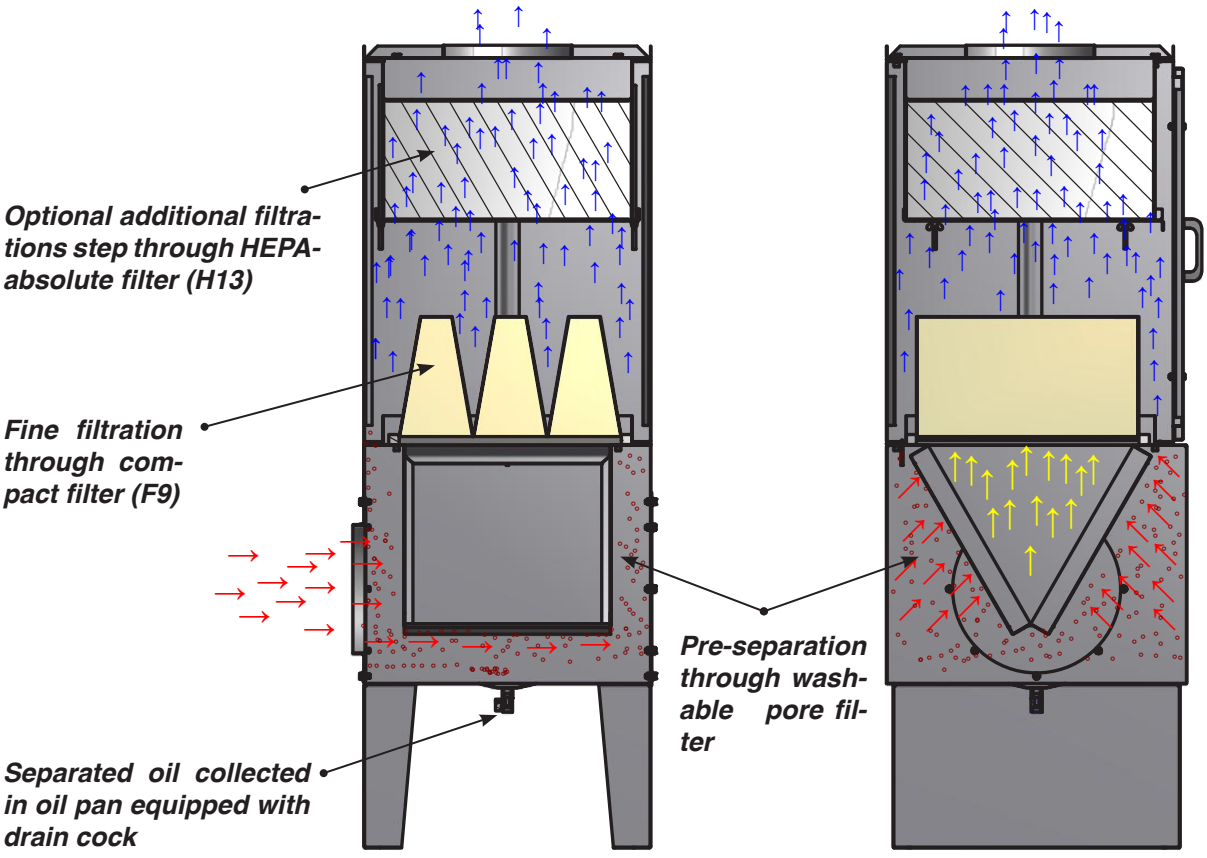
Rev. 08.22

Gram Clean Air A/S
www.GramCleanAir.com

Principle sketch for flow through oil mist filter type OUK:



Principle sketch for flow through oil mist filter type OUK with HEPA-filter:



Construction/surface
Filter cabinet is made in 1.5mm black steel plate
Surface powder enamelled RAL 5007/7011 structure

Further is available:
- Version in hot-galvanized, enamelled steel plates for outdoor mounting
- Top with outlet grid without connection (04 342 158), only for OUK 4000
- Unit preparation for cooling lubricants containing boric acid (changed joints and filter sealings) (08 291 705)
- Fan module M7 for building on top of OUK 4000 (see below)
- Outlet connection to the free on fan module

Photo left
Fan module type M7 can be built on top of OUK 4000, so you achieve a compact, complete unit and possibly save piping to an external fan.

Photo:
OUK 4000M7 with built-in Minihelic-differential pressure manometer and fan module VE 3900M7 in sound enclosure.

Photo:
Fan module VL 1150M7 in sound enclosure with HEPA-filter and Minihelic-differential pressure manometer (D-version)

Photo above
Where recirculation is permitted, fan modules for OUK 4000 are available with diffused outlet through grid in top. Is mounting fan M7 in sound enclosure selected, HEPA-filter can be placed on fan pressure side and thus contribute to fan noise reduction. As option an outlet connection with outlet to the outside is available.

Rev. 08.22

Gram Clean Air A/S
www.GramCleanAir.com

Oil mist filter type OUK is available in the sizes as stated in the form below.

Please, contact us for assistance in selecting the optimal unit taking into consideration air volume, type and volume of cooling lubricant, operation times etc.

Type	Order no.	△ P start/end [1] [Pa]	Filter area [m²]	Max. capacity [m³/h]	Number prefilter [2]	Number fine filter F9 [3]	Number Minihelic-differential pressure manometer [4]	Number absolute filter (HEPA / H13) [5]	Weight [kg]
OUK 4000M7	04 345 000	900/1200	19	4000	2	1	-	-	86
OUK 4000M7	04 345 010	900/1200	19	4000	2	1	1	-	86
OUK 4000M7	04 345 800	1100/1500	19	4000	2	1	-	1	123
OUK 4000M7	04 345 810	1100/1500	19	4000	2	1	2	1	123
OUK 8000	04 346 050	900/1200	38	8000	4	2	1	-	183
OUK 8000	04 346 850	1100/1500	38	8000	4	2	2	2	280
OUK 12000	04 347 050	900/1200	57	12000	6	3	1	-	252
OUK 12000	04 347 850	1100/1500	57	12000	6	3	2	3	390
OUK 16000	04 349 050	900/1200	77	16000	8	4	1	-	342
OUK 16000	04 349 850	1100/1500	77	16000	8	4	2	4	500

[1] Pressure drop stated above filter.
[2] Pore filter 35 in aluminium frame, 495x495x50mm (08 178 000)
[3] Compact filter F9 in plastic frame, 592x592x292mm (08 291 550)
[4] Minihelic-differential pressure manometer 0-1kPa (09 500 200)
[5] Absolute filter in metal frame, HEPA/H13, 610x610x292mm (08 177 900)

Please, note:
If oil or cooling lubricant contain boric acid, the fine filter must be mounted in galvanized steel frame! Also joints and sealings must be changed (08 291 705).

Rev. 08.22