
ICARUS

Air Filtration

Oily mist
filter unit



Icarus

Icarus is a static filter unit for the purification of air containing oily mists, micro-mists and smoke resulting from the use of coolants (emulsion like neat oil). It can be used on all types of machine tools and for all removal operations.

It is available in 3 sizes, with flow rates from 600 to 2000 m³/h and with different combinations of increasing filtration efficiency, up to an efficiency of 99.95%.

Losma guarantees that each filter unit is individually tested through rigorous control procedures.

A quality and functional test certificate is issued for each unit.

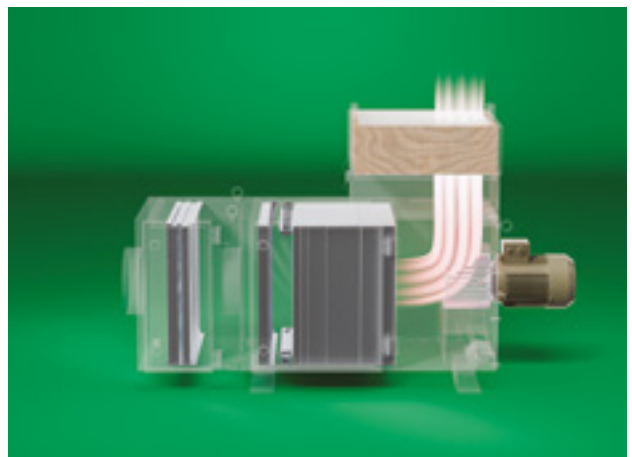
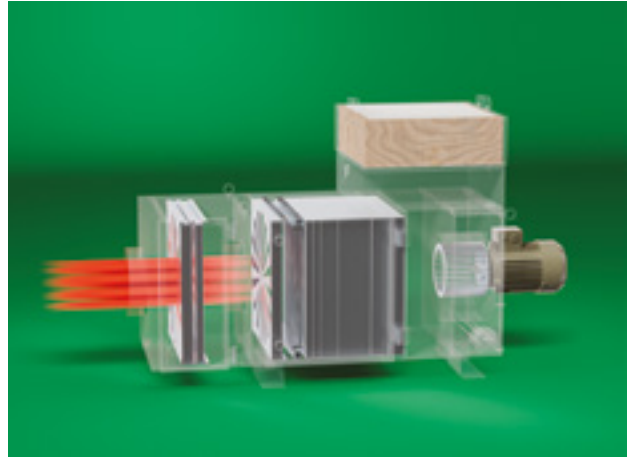


LOSTMA®

ICARUS

Operation

- The polluted air is suctioned in thanks to the vacuum generated by a high-efficiency centrifugal fan placed over the filters. The fan is thus free from any possibility of damage as it only works with clean air, free of any residual pollutants.
- The air initially passes through a special baffle that has the task of evenly distributing the suctioned air over the entire useful contact surface of the filters, thus ensuring proper utilisation of the filters.
- The air then passes through a battery of filters with increasing efficiency until an efficiency of more than 95% is reached with pollutant particles even smaller than one micron, which can be raised to 99.95% with the use of an absolute post-filter (HEPA FILTER) in accordance with EN 1822.

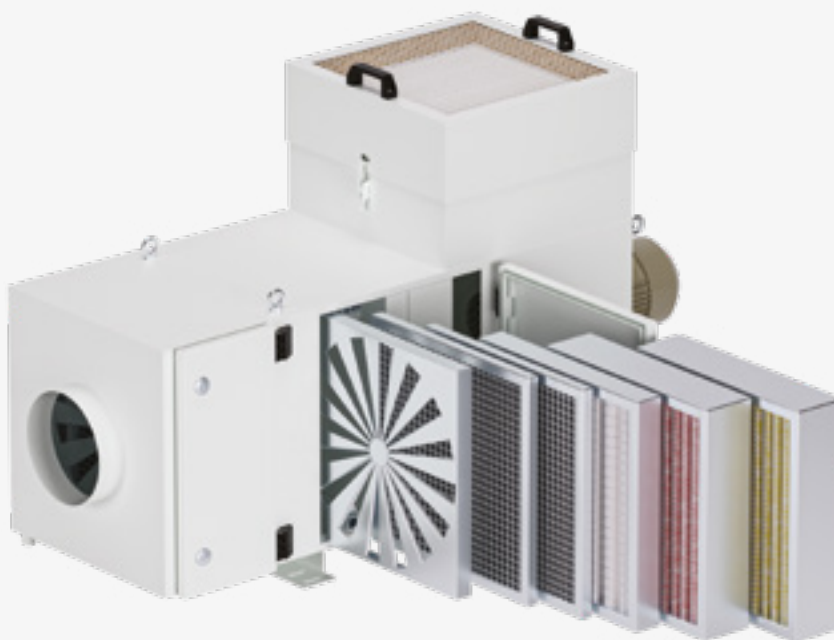


Right: example sequence taken from product operation video

SEQUENCE OF THE SUPPLIED FILTERS:

The arrangement of the Icarus internal filters is designed to provide increasing filtration efficiency.

The filters are easily accessible by removing the tightening screws and opening the side door, allowing for simple, fast and clean maintenance.



1. METALLIC G2

65-80% efficiency in accordance with standard UNI EN 779.

3. SYNTHETIC F7

85% efficiency.

2. SYNTHETIC G3

80-90% efficiency in accordance with standard UNI EN 779.

4. SYNTHETIC F9

95% efficiency (*also available with H13 upon request).

1.



2.



3.



4.



Advantages

ENERGY EFFICIENCY

The use of high-efficiency centrifugal fans enables high performance in terms of flow rate and pressure, with considerably reduced installed power and limited energy consumption. Icarus is also remarkably quiet.

FAST AND EASY MAINTENANCE

Access to the filter section is truly simple and straightforward, with no need to unscrew or dismantle anything. Simply open the door closed with two locks for easy access to the filters, which can be removed very easily and replaced quickly.

PRESSURE GAUGE

Icarus is equipped as standard with a precise instrument to read the clogging status of the internal filters.



Models	Dimensions (mm)																
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
Icarus S	110	500	660	210	148	870	450	930	785	505	125	250	365	290	287	897	1107
Icarus M	110	600	785	235	198	1020	450	930	785	505	125	250	365	290	287	997	1232
Icarus L	170	600	815	270	198	1095	570	1050	905	625	125	250	365	350	287	1047	1317

Models	Power (kW)		Maximum air flow * (m³/h) 50/60 Hz		Pressure (Pa)		Opening inlet (mm)	Noise level (dba)	RPM (rpm)		Net weight (Kg)
	50 Hz	60 Hz	From	To	From	To			50 Hz	60 Hz	
Icarus S	0,37	0,44	600	670	580	800	150	68,1	2820	3360	52
Icarus M	0,75	0,75	1050	1150	1000	1400	200	69,9	2900	3390	57
Icarus L	1,5	1,5	1600	1850	1080	1500	200	71,5	2880	3410	81

* Free inlet

Icarus-E

The Icarus-E is an electrostatic extractor for the purification of air containing oil mists, micro-mists and fumes from all major machining operations that use whole oil as a coolant.

It is available in 3 sizes with flow rates from 600 to 1,700 m³/h and with different combinations of increasing filtration efficiency, up to an efficiency of 99.95% (when using the final HEPA H13 filter).

Standard unit supply includes a CE-compliant electrical panel, including a clogging and voltage presence light and safety microswitch.

Losma guarantees that each filter unit is individually tested through rigorous control procedures.

A quality and functional test certificate is issued for each unit.



Operation

- The polluted air is suctioned in thanks to the vacuum generated by a high-efficiency centrifugal fan placed over the filters. The fan is thus free from any possibility of damage as it only works with clean air, free of any residual pollutants.
- The air initially passes through a special baffle that has the task of evenly distributing the suctioned air over the entire useful contact surface of the filters, and cells.
- After passing through a metal pre-filter (regenerable), the air is conveyed into the ionising section of the cells, electrostatically charging itself and then passing into the collector section composed of numerous aluminium foils that firmly retain even the most microscopic impurities.



SEQUENCE OF THE SUPPLIED FILTERS:

The arrangement of the Icarus Electrostatic internal filters is designed to provide increasing filtration efficiency. In the case of sizes M and L, the sequence Metallic G2 + Electrostatic Cell is repeated twice.

The filters are easily accessible by removing the tightening screws and opening the side door, allowing for simple, fast and clean maintenance.



1. METALLIC G2

65-80% efficiency in accordance with standard UNI EN 779.

3. ELECTROSTATIC CELL

2. SYNTHETIC F7

85% efficiency.

1.



2.



3.



Advantages

VERSATILITY AND MODULARITY

The possibility of using pre and post filtration systems allows for the use of the Icarus-E filter for all modern mechanical processes, from the simplest to the most demanding. The 3 different construction models and relative suction power of the Icarus-E filter also make it easier to choose a solution that is always adequate for your needs without wasting energy on oversized systems or, on the contrary, inefficient on inadequately sized systems.

REGENERABLE

Icarus-E only uses regenerable filters, allowing considerable savings in the purchase, maintenance and disposal of normal clogging filters.

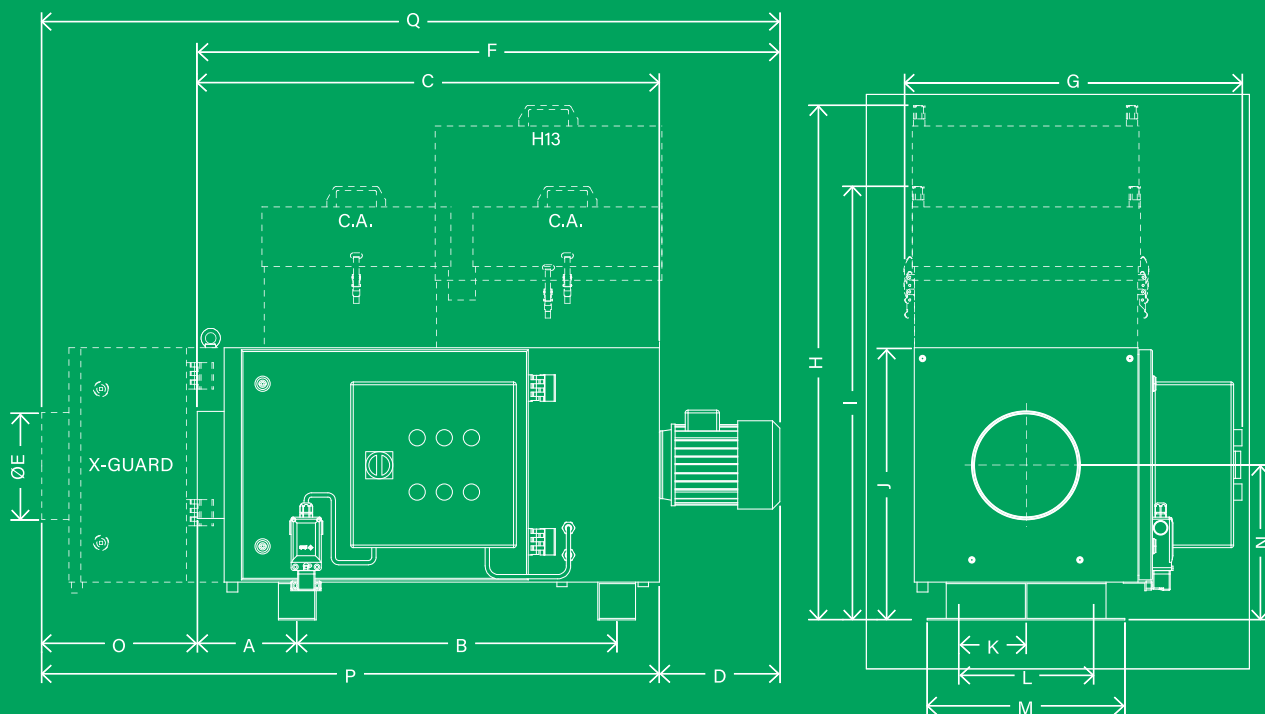
* In the Icarus-E S version the pre-filtration consists of an F7 filter.

FAST AND EASY MAINTENANCE

Access to the filter section is truly simple and straightforward, with no need to unscrew or dismantle anything. Simply open the door closed with two locks for easy access to the filters, which can be removed very easily and replaced quickly.



Technical Data



Models	Dimensions (mm)																
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
Icarus ES	1380	500	655	210	148	865	450	930	785	505	125	250	365	290	287	942	1152
Icarus EM	180	600	855	235	198	1105	450	390	785	505	125	250	365	290	287	1157	1392
Icarus EL	160	600	855	270	198	1215	570	1050	905	625	125	250	365	350	287	1172	1442

Models	Power (kW)		Maximum air flow* (m³/h) 50/60 Hz		Pressure (Pa)		Opening inlet (mm)	Noise level (dba)	RPM (rpm)		Net weight (Kg)
	50 Hz	60 Hz	From	To	From	To			50 Hz	60 Hz	
Icarus ES	0,37	0,44	600	670	580	800	150	68,1	2820	3360	52
Icarus EM	0,75	0,75	1050	1150	1000	1400	200	69,9	2900	3390	57
Icarus EL	1,5	1,5	1600	1850	1080	1500	200	71,5	2880	3410	81

* Free inlet



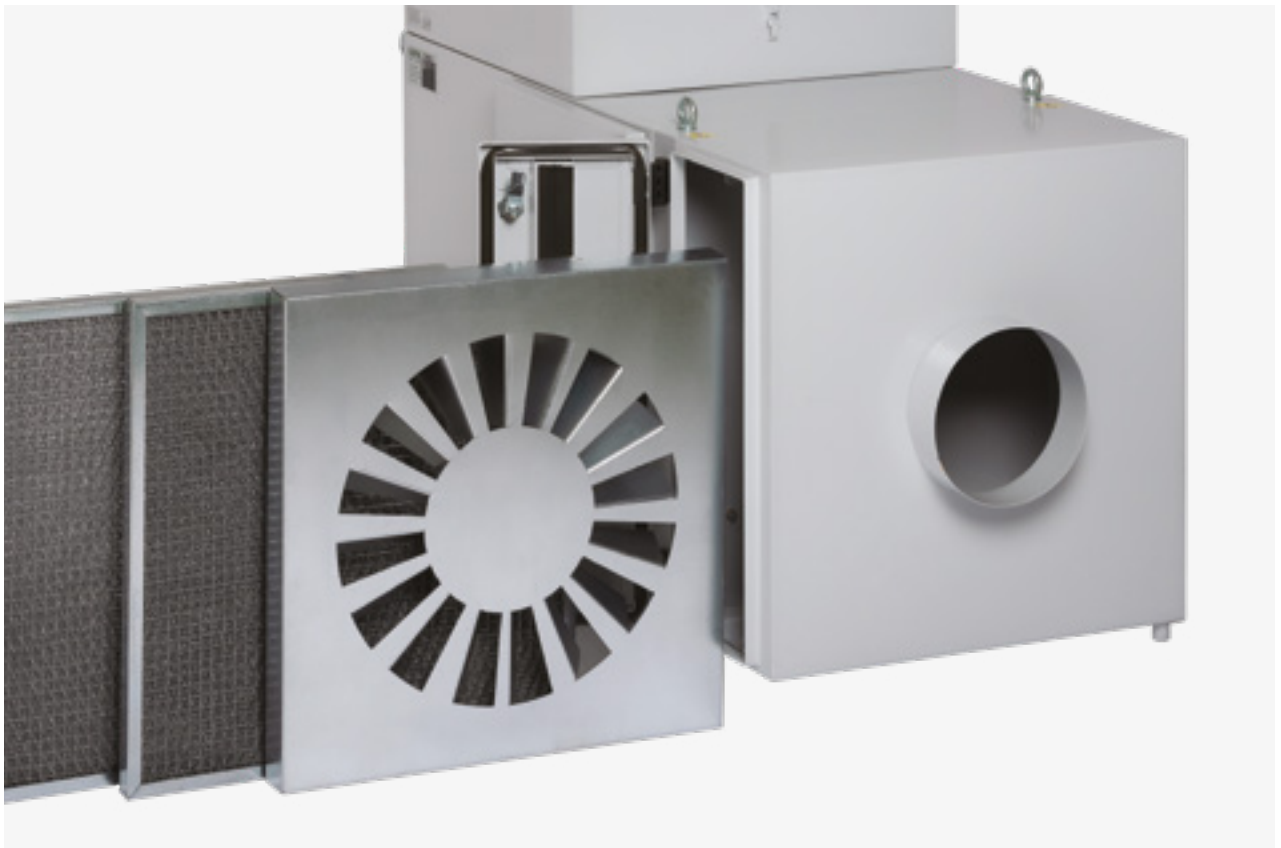
Optional

1. X-Guard pre-filter

2. H13 post-filter

1. X-Guard pre-filter

Pre-filter for chips and dust, equipped with metal and synthetic filter stages. Useful for maximising filtration efficiency at high outputs of oil mist mixed with metal chips and dust.



2. H13 post-filter

Can obtain a very high level of filtration, 99.95% according to EN 1822. Especially suitable in the presence of micro-mists or fumes.

