

Losma / Air filters  
**Icarus + Icarus E**

Mist collector

**ENG**



## Icarus



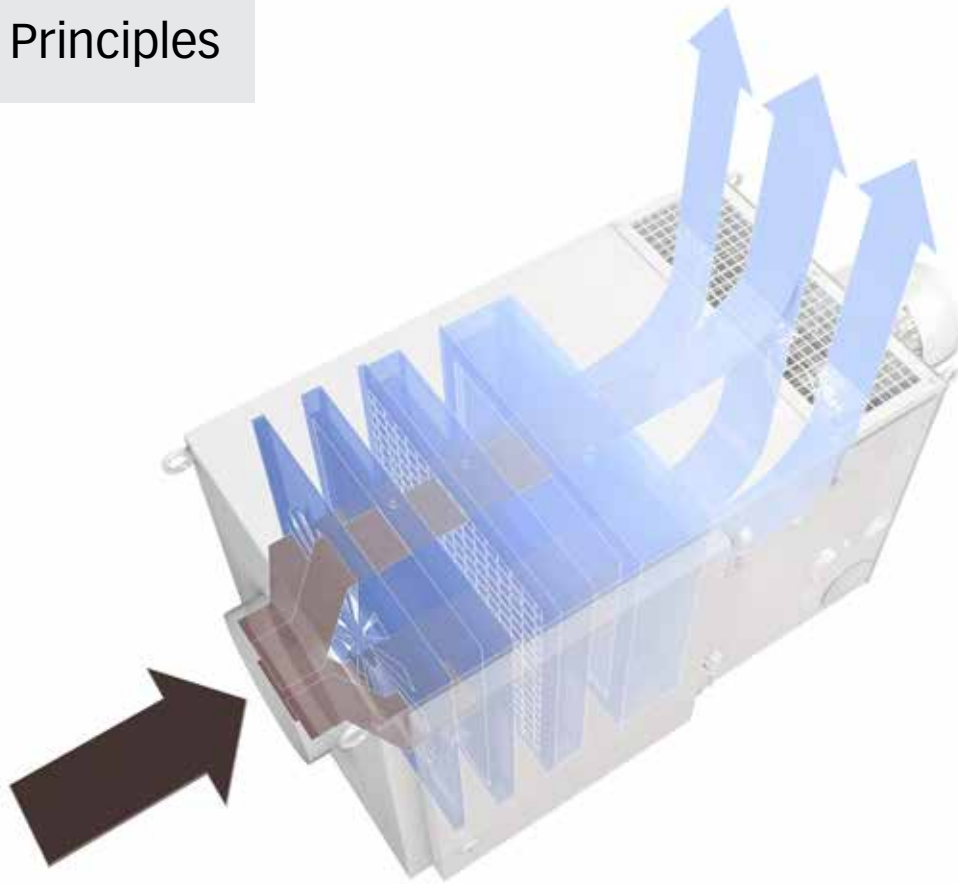
*Losma grants that every single system is tested through strict control procedures. Every unit is provided with a Quality and Functional Test Certificate.*

ICARUS is a static extraction system for filtration of air containing oil mists, micro-mists and smoke, generated from coolants (both emulsion or neat oil), which can be used on most types of machine

tool and for a majority of machining processes. Icarus is available in three sizes with flowrate from 600 to 1650 m<sup>3</sup>/h with different filtration efficiency combinations, up to a performances of 99,97%.



## Working Principles



Polluted air is collected thanks to negative pressure created by a high efficiency centrifugal fan, mounted after the filters. In this way the fan cannot be damaged, since it works with clean air without any pollutant residual.

Air passes initially through a special deflector, whose function is to distribute uniformly the air onto the filter's surface, assuring a proper use of the whole useful contact area of the filter. Then the air crosses a series of filters with increasing efficiency up to and more than 95% with polluted particles measuring less than a micron. Efficiency can reach 99,97% with the use of a HEPA Filter following EN 1822 regulation.

### Filter series, standard equipment

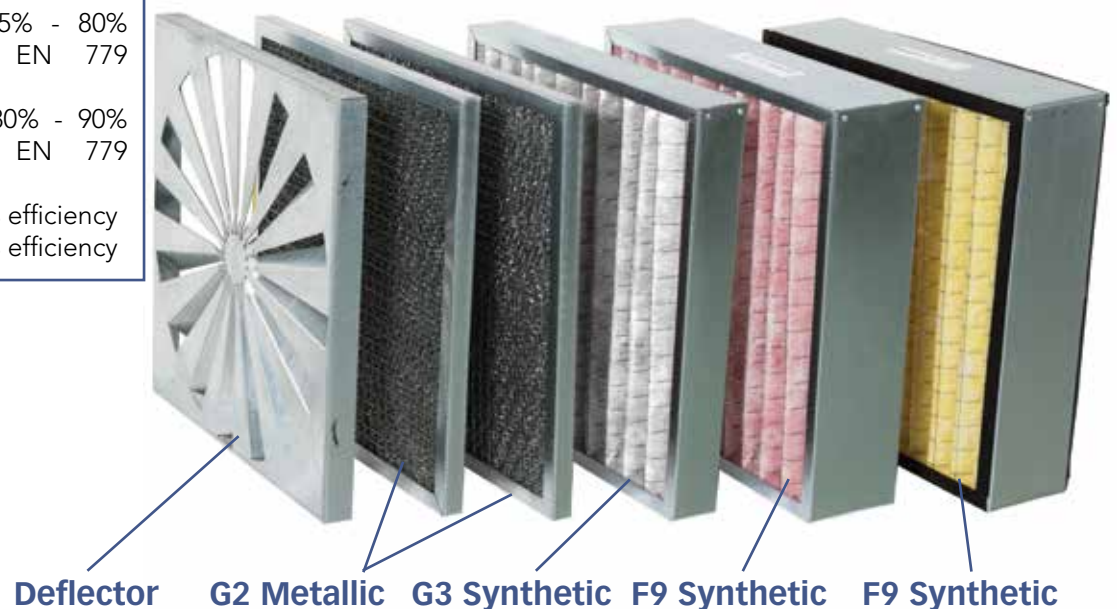
#### DEFLECTOR

METALLIC G2 filter with 65% - 80% efficiency following UNI EN 779 regulation

SYNTHETIC G3 filter with 80% - 90% efficiency following UNI EN 779 regulation

SYNTHETIC F7 filter with 85% efficiency

SYNTHETIC F9 filter with 95% efficiency



Deflector

G2 Metallic

G3 Synthetic

F9 Synthetic

F9 Synthetic

# Plus



## Versatility and modularity:

The use of filters with increasing efficiency and the possibility of implementing pre and post-filtration systems make Icarus the ideal filter for all modern mechanical machining, from the less demanding to the most demanding ones. The three different versions and the different extracting power of Icarus facilitate the choice for the best appropriate solution for the customer needs, avoiding energy waste for over dimensioned systems, or inefficient systems for low power selection.



## Manometer:

ICARUS is equipped with a pressure gauge to read the internal filter obstruction state.



## Energy efficiency:

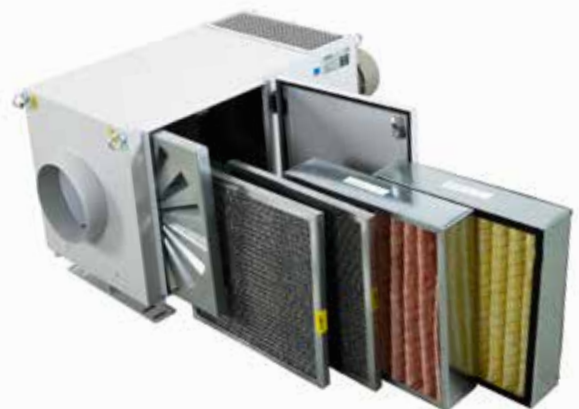
Access to filtering section is very easy and quick, you don't need to unscrew or dismantle any part. Just open the two locks on the door and access to the filters, which can be extracted easily and changed in a few minutes.

**green®**  
Biofilter by LOSMA



## Green®:

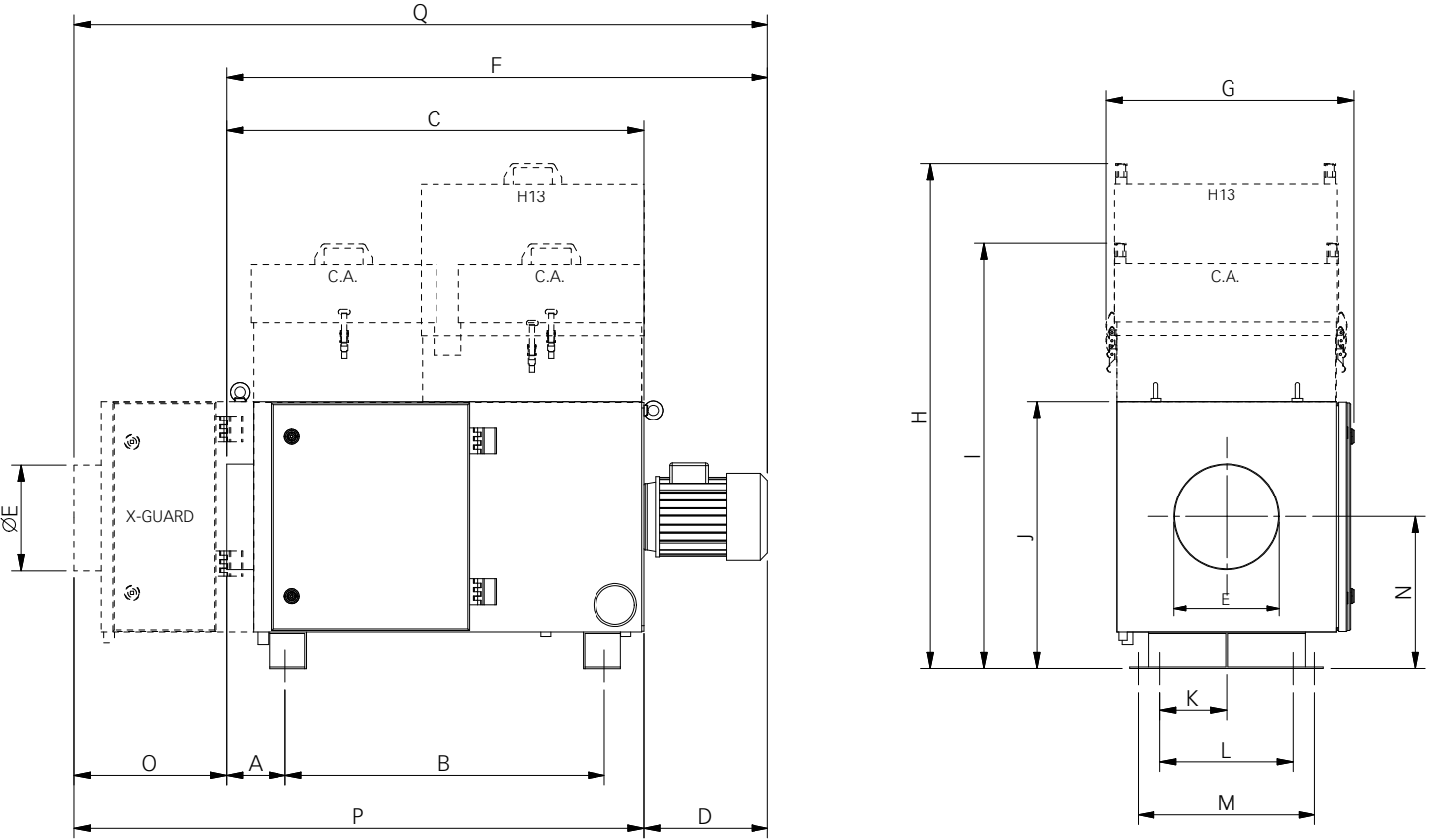
Losma has always paid special attention to eco-sustainability of its products and to the eco-friendly life of its spare parts. That's why an eco-compatible **patented bio filter** was developed, made only of natural fibres it can be used as pre-filter replacing the synthetic filters.



## Easy and quick maintenance:

Access to filtering section is very easy and quick, you don't need to unscrew or dismantle any part. Just open the two locks on the door and access to the filters, which can be extracted easily and changed in a few minutes.

# Technical Data



Icarus	Dimensions [mm]																
Models	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	809	785	505	125	250	365	290	287	897	1107
Icarus M	110	600	785	235	198	1020	450	950	785	505	125	250	365	290	287	997	1232
Icarus L	160	600	805	280	198	1075	570	1070	905	625	125	250	365	350	287	1047	1317

Icarus	Performance Data									
Models	Power		Max air flow		Head	Noise level	ø Inlet	RPM [rpm]		Net Weight
	50[Hz]	60[Hz]	50[Hz]	60[Hz]	[mmH2O]	[dBa]	[mm]	50[Hz]	60[Hz]	[Kg]
Icarus S	0,37	0,44	600	660	50	68,1	150	2820	3360	52
Icarus M	0,75	0,75	1000	1100	80	69,9	200	2900	3390	57
Icarus L	1,5	1,5	1650	1750	105	73,8	200	2880	3410	81

Icarus L



Icarus M



Icarus S





## Icarus E



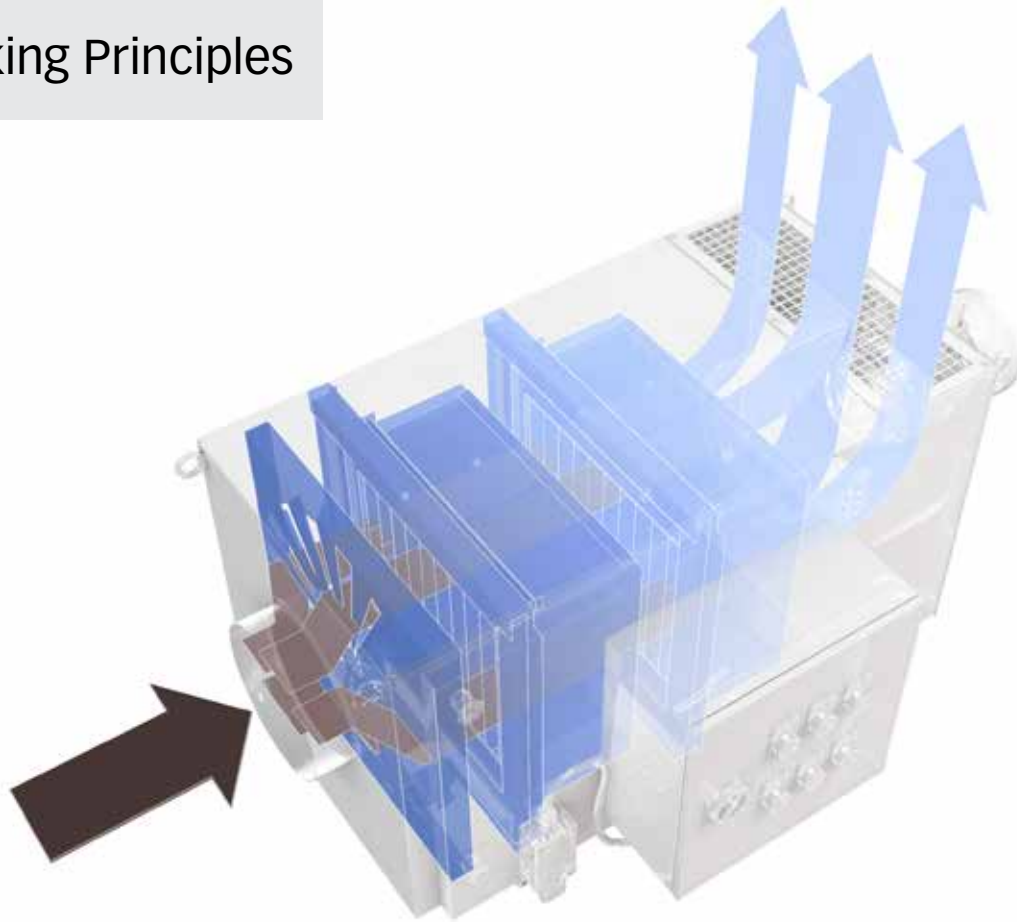
*Losma grants that every single system is tested through strict control procedures. Every unit is provided with a Quality and Functional Test Certificate.*

ICARUS E is an electrostatic filter for the extraction of air containing oil mists, micro-mists, vapours and smoke generated by machining processes, especially those using neat oil. It is available in three sizes (S, M, L) from 600 to 1.700 m<sup>3</sup>/h with different increasing filtering efficiency

combinations, up to 99,97% (with the use of HEPA H13 final filter). Standard equipment of the system is made by an electrical control box, "CE" regulation compliant, including an obstruction alarm, power alarm and micro-switch for safety.



## Working Principles

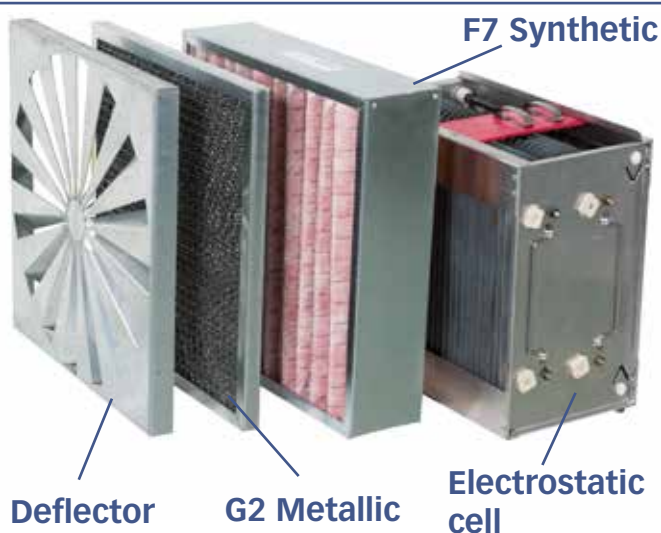


Polluted air is collected thanks to negative pressure created by a high efficiency centrifugal fan, mounted after the filters. In this way the fan cannot be damaged, since it works with clean air without any pollutant residual.

Air passes initially through a special deflector, whose function is to distribute uniformly the air onto filter's and cell's surface. After passing through the metallic pre-filter (washable) air passes through the ionizing section of cells, charging electrostatically, and passing then into the collector section composed by many aluminium foils, which holds firmly also the tiniest particles.

### Filter series, standard equipment Icarus E S

DEFLECTOR  
METALLIC G2 filter (washable) with an efficiency range of 65-80% following the regulation UNI EN 779  
ELECTROSTATIC WASHABLE CELL  
SYNTHETIC F7 filter with 85% efficiency



### Filter series, standard equipment Icarus E M+L

DEFLECTOR  
METALLIC G2 filter (washable) with an efficiency range of 65-80% following the regulation UNI EN 779  
ELECTROSTATIC WASHABLE CELL



## Plus



### **Versatility and modularity:**

The use of filters with increasing efficiency and the possibility of implementing pre and post-filtration systems make Icarus E the ideal filter for all modern mechanical machining processes, from the easiest to the most demanding ones. The three different building versions and the different extracting power of Icarus E facilitate the choice for the best appropriate solution for customer requirements, avoiding energy waste for over dimensioned systems, or inefficient systems for low power selection.



### **Re-usable:**

Icarus E uses only re-usable filters which saves expenses in replacing, maintenance and disposal of the regular obstruction filters.

\*Icarus E S version pre-filtration is made with an F7 filter.



### **Energy efficiency:**

Using centrifugal fans with high efficiency grants high performances for flowrate and pressure, even with reduced power installation and limited energy usage. Icarus is also very silent.

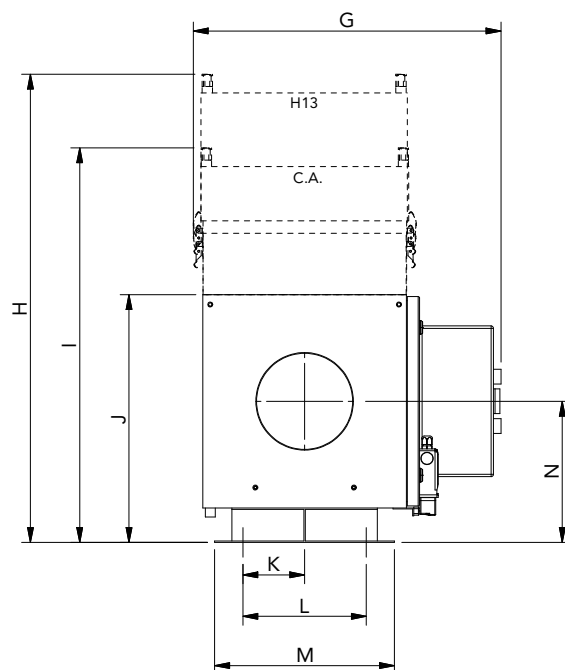
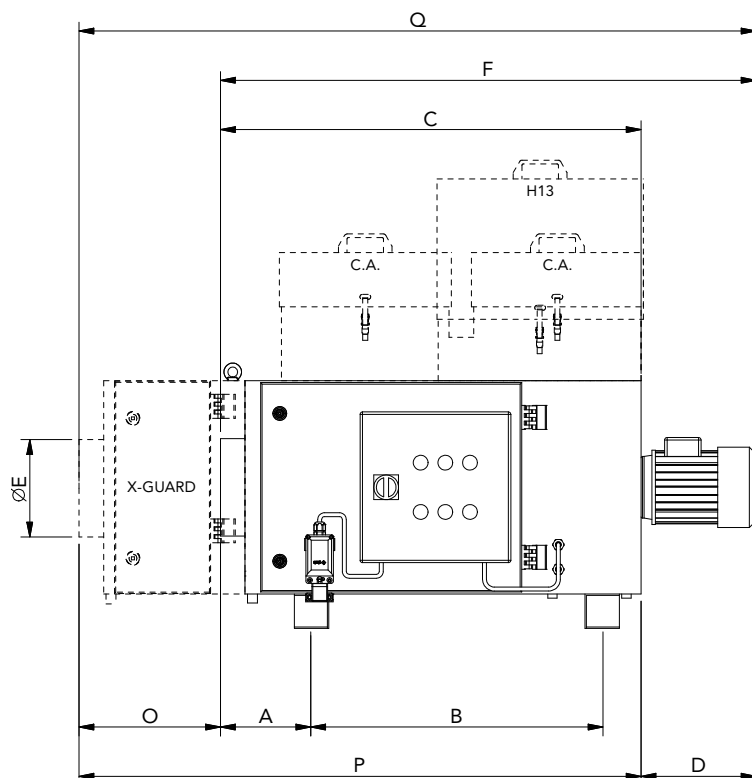


### **Easy and quick maintenance:**

Access to filtering section is very easy and quick, you don't need to unscrew or dismantle any part. Just open the two locks on the door and access to the filters, which can be extracted easily and changed in a few minutes.



# Technical Data



Icarus E																	
Models	Dimensions [mm]																
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
Icarus E S	110	500	655	220	148	865	600	809	785	505	125	250	365	290	287	942	1152
Icarus E M	180	600	860	235	198	1090	605	950	835	505	125	250	365	290	287	1157	1392
Icarus E L	170	600	895	280	198	1175	730	1070	945	625	125	250	365	350	287	1172	1442

Icarus E									
Models	Power		Max air flow		Noise level	ø Inlet	RPM [rpm]		Net Weight
	50[Hz]	60[Hz]	50[Hz]	60[Hz]	[dBa]	[mm]	50[Hz]	60[Hz]	[kg]
Icarus E S	0,37	0,44	650	750	68,1	150	2820	3360	65
Icarus E M	0,75	0,75	1150	1250	69,9	200	2900	3390	70
Icarus E L	1,5	1,5	1750	1900	73,8	200	2880	3410	105

Icarus E L

Icarus E M

Icarus E S



# Accessori

## Icarus + Icarus E

### H13

Provides a very high filtration efficiency, up to 99,95%, following the EN 1822 regulation. Useful in case of micro-mists and smoke



### X-Guard

Filtration module for swarf and dust, working through metallic and synthetic filtration stages. Useful to optimise the air suction efficiency in case of high production of oil mists containing dusts and metallic swarf.



### ICARUS + XGUARD + H13



## Installations





Health



Savings



Efficiency



Environment



Safety

F005.116.00  GreyLab.it

# LOSMA<sup>®</sup>

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