LOSMA®
WORKING CLEAN, BREATHING HEALTHY

Air filters | Liquid filters | Engineering

Galileo Extra

Mist Collector

New

ENG

Galileo Extra

Galileo Extra is a patented centrifugal filter for mist generated from neat oil and emulsions used in machine tools, also suitable in the presence of particulate.

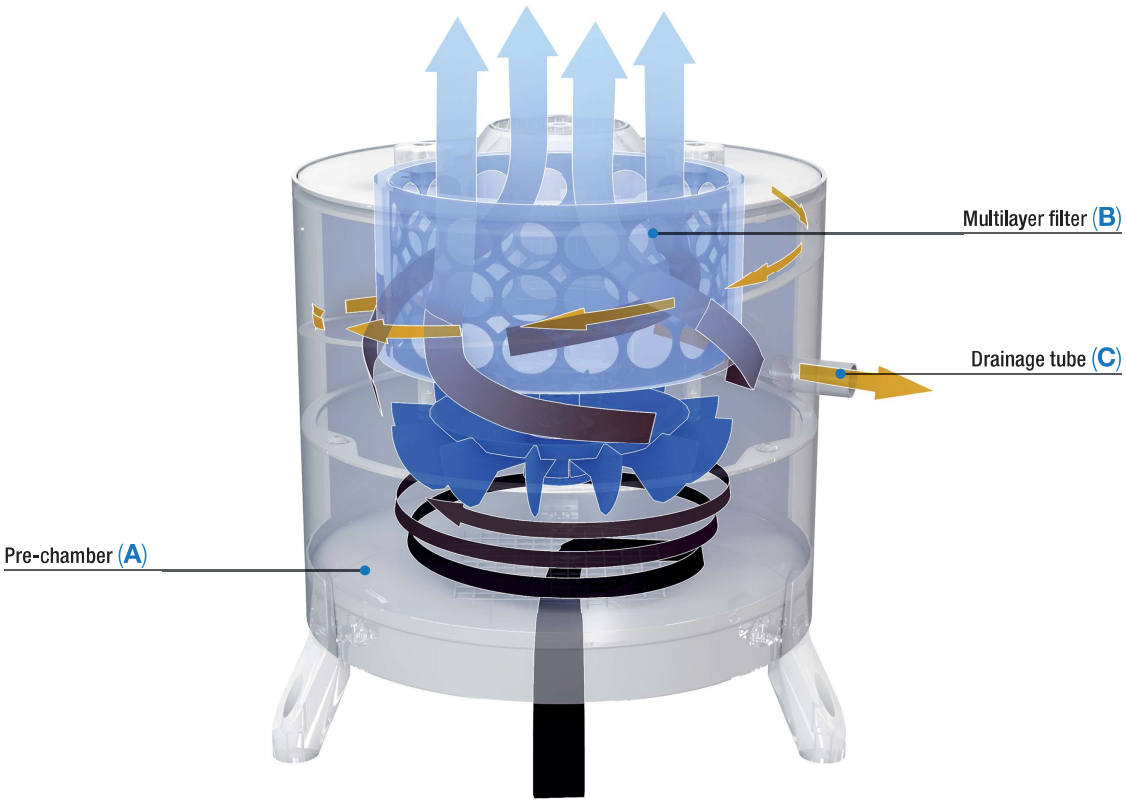
Galileo Extra is available in 5 models with throughputs from 325 to 3.500 m^3/h.

Patented in Italy, Europe, USA, China and Japan.

ALL FILTERS ARE TESTED BEFORE DELIVERY

LOSMA grants that every single system is tested through strict control procedures.
Every unit is provided with a qualitative and functional test certificate.

Working principles



1 Polluted air is drawn from machine tool into the lower pre-chamber (**A**) of Galileo Extra.

2 The acceleration effect, due to the centrifugal force generated by a rotating turbine, makes the oil particles bind together and return to liquid state, using the coalescence principle.

3 A special Multilayer filter (**B**) having high filtration efficiency, stops and catches even the smallest pollutant particles, avoiding their dispersion in environment.

4 Thanks to a special drainage tube (**C**) the liquid oil is sent back to the machine tool, to be re-used in working process.

Filter Series

Plus

NEW FILTERS FOR HIGHER EFFICIENCY

Internal filters have been redesigned to increase filtration efficiency even for the smallest particles.

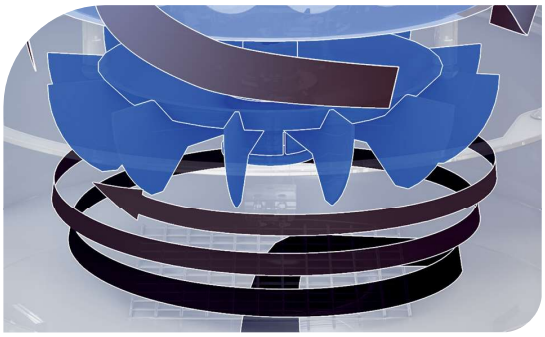
The internal materials, tested by the Losma laboratories, have passed stress compatibility tests in contact with numerous types of oil and emulsions on the market.

HIGH FILTRATION LEVEL AND LONG LASTING FILTERS

The combination of the turbine centrifugal action and a high efficiency multilayer filter set guarantees a high filtration level. Filters are positioned after the centrifugal action of the turbine, thus they are exposed to a limited amount of polluting agents, having a small size. This location grants Galileo Extra filters a longer life than the one of the most common centrifugal or static filters in the market.

REDUCED ELECTRICAL CONSUMPTION

Inspired to Blue Philosophy, Galileo Extra uses energy saving motors with high efficiency and very low power (KW) (see table at page 10).



MORE STATIC PRESSURE THANKS TO NEW TURBINES

Even higher static pressures to maintain optimal suction flow rates also by installing Galileo Extra at a distance from the filtering source
Special turbine designed to eliminate the problem of dust deposits on its surface, this turbine solves the problem of vibrations even with large amounts of particulate matter.

QUICK AND EASY MAINTENANCE

Internal filters can be cleaned or changed simple opening of a cover.

INNOVATIVE DESIGN

Galileo Extra combines the Italian design with cutting-edge technologies for a better working environment.

Optional

Filter clogging sensor

The new sensor is able to detect the progressive clogging state of the Galileo Extra filters, signalling three main operating phases (Led version):

- GREEN: Clean Filters;
- YELLOW: Pre clogging;
- RED: Clogging.

Patent application filed

Also thanks to an exclusive software, it is possible to detect possible ANOMALY conditions:

- Upstream obstructions (piping, grid, etc.);
- Zero flow.

Thanks to an integrated TIMER, the sensor allows to know when 15,000 working hours have been achieved, which is the recommended threshold for changing the filter set.

The sensor can be positioned on Galileo Extra or in any other part of the machine tool where the operator is more comfortable reading the data.

Thanks to the Self-learning button, it automatically sets itself to the initial values, making installation extremely easy.
From that time, all flow changes are measured according to the GREEN, YELLOW, RED scale.

The new sensor works with all accessories (G-Guard Plus, G-Clipper Plus, Horizontal input) And it can be integrated with the CNC of the machine tool (IoT Ready version), providing feedback in real time on the air filter conditions.

The sensor comes in two versions:

Led version

Through a luminous signal it shows:

- the filter clogging status: Clean Filters - Pre-clogging - Clogging.
- Possible upstream obstructions: instantaneous or progressive obstructions of the inlet pipe or suction grid in the machine cabin (e.g. chip or liquid build-up).
- Zero flow alarm: e.g. Galileo Extra turned off, motor not working or turned off, piping disconnected).
- Timer: It indicates the achievement of 15,000 working hours (the threshold recommended for changing the filters).

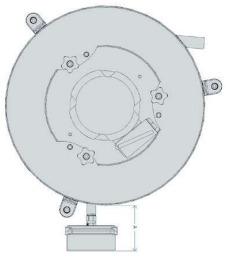
IoT Ready version sensor

- Transmission of data directly to the CNC machine by cable related to:
- The filter clogging status: Cleaned Filters - Pre-intasamento - Clogging.
- Possible upstream obstructions: instantaneous or progressive obstructions of the inlet pipe or suction grid in the machine cabin (e.g. chip or liquid build-up).
- Zero flow alarm: e.g. Galileo Extra turned off, motor not working or turned off, piping disconnected).
- Timer: It indicates the achievement of 15,000 working hours (the threshold recommended for changing the filters).
- Remote or CNC control:
- Configuration conditions: possibility to configure the main monitoring parameters in real time.
- Re-setting of the alarms.
- Timer resetting.
- Zero flow.

Technical data

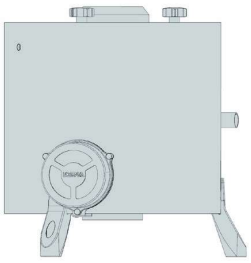
LED version

- Voltage: 24V DC
- Signal type: LED display
- Size: Dimensions: A = 110 mm
  Ø = 115 mm



IOT Ready version

- Voltage: 24V DC
- Signal type: Digital
- Size: Dimensions: A = 110 mm
  Ø = 115 mm



Optional

G-Clipper Plus

Post–filter cartridge for micro-mist, smoke and vapor.
It allows to reach a high filtration level up to 99.97%.

G-Guard Plus

Metallic pre filter to maximise filtration efficiency and filter duration in the presence of high oil mist production, even at high pressures, mixed with powders and metal shavings.
The G-Guard plus has an inspection door for easier maintenance and is completely washable.

Installations

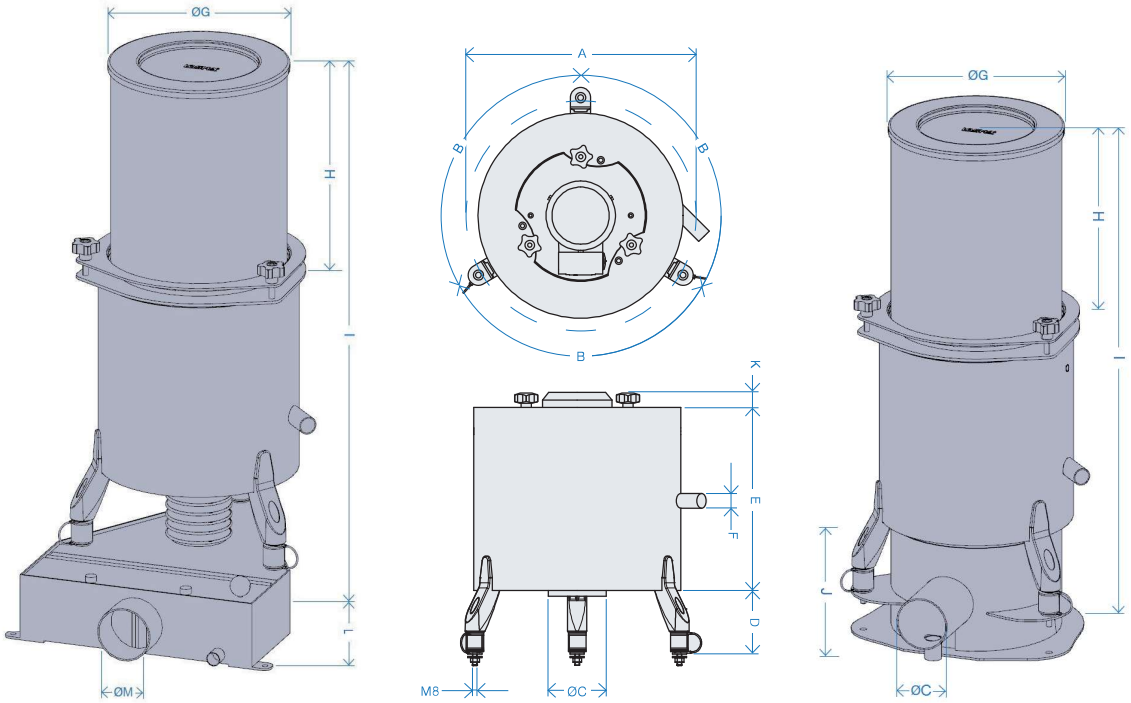
Optional

Horizontal input

Ideal for installation at operator or trolley height.

Installations

Technical data



MODELS	Dimensions (mm)											
	ØA	<) B	ØC	D	E	ØF	ØG	H	I	J	K	L
GX250	330	120	78	100	280	25	254	310	700	163	26	99
GX500	400	120	98	100	310	25	315	310	730	198	26	118
GX1000	490	120	148	90	400	25	380	425	930	264	26	168
GX2000	530	120	148	90	450	25	380	425	950	264	26	168
GX3000	560	90	198	90	550	25	460	315	1025	339	26	223

MODELS	Flow Rate (m^3/h)*		Pressure (Pa)		Power		Inlet	Noise level (dBa)		Net Weight	RPM (rpm)	
	50 (Hz)	60 (Hz)	50 (Hz)	60 (Hz)	50 (Hz)	60 (Hz)	(mm)	50 (Hz)	60 (Hz)	(kg)	50 (Hz)	60 (Hz)
GX250	245	280	630	900	0,09	0,11	80	61,4	64,2	11	2805	3405
GX500	535	620	1040	1250	0,25	0,29	100	68,4	72,2	15	2755	3355
GX1000	1020	1470	1520	1360	1,10	1,27	150	69,8	73,4	36	2910	3510
GX2000	1930	1800	1450	2180	1,50	1,75	150	74,4	75,6	41	2910	3510
GX3000	2300	2750	1500	2150	2,20	2,55	200	76,2	79,1	62	2910	3510

* Free inlet.