

# Galileo Extra

Mist Collector

New



# 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<sup>3</sup>/h.

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

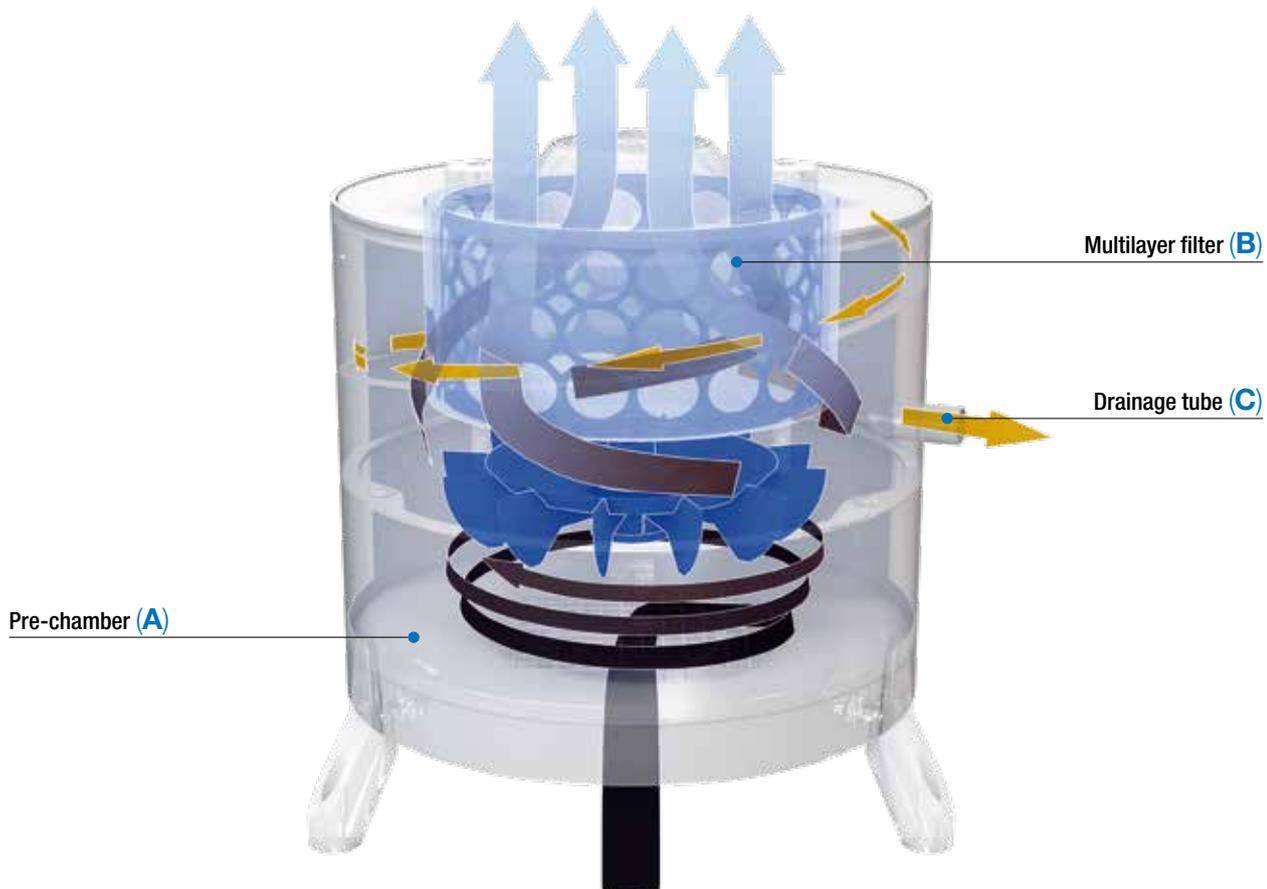


LOSMA grants that every single system is tested through strict control procedures.

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 X-VIEW sensor

The new X-VIEW 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, X-VIEW sensor allows to know when 15,000 working hours (ex. 5 years/ 8 hours per day) have been achieved, which is the recommended threshold for the check of the filter set.

X-VIEW 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.

X-VIEW 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:

### X-VIEW 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 check of filters).

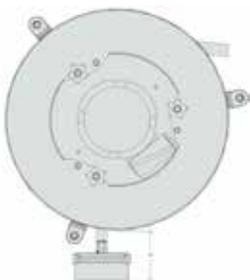
### X-VIEW IoT Ready version

- 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 check of 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

### X-VIEW LED

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



### X-VIEW IoT Ready

- 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.

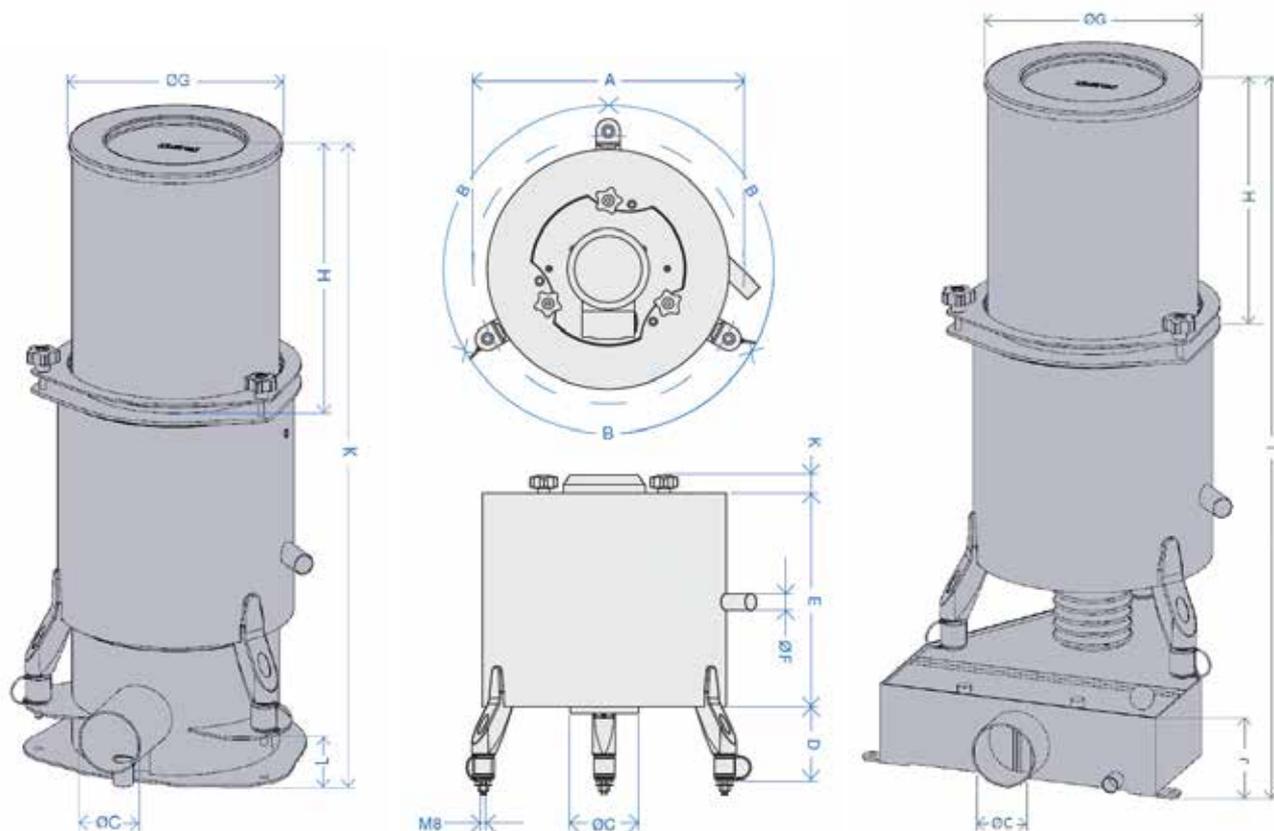


# Installations

---



# Technical data



MODELS	Dimensions (mm)											
	ØA	< B	ØC	D	E	ØF	ØG	H	I	J	K	L
<b>GX250</b>	330	120	78	100	280	25	254	310	700	163	789	99
<b>GX500</b>	400	120	98	100	310	25	315	310	730	198	838	118
<b>GX1000</b>	490	120	148	90	400	25	380	425	930	264	1083	168
<b>GX2000</b>	530	120	148	90	450	25	380	425	950	264	1133	168
<b>GX3000</b>	560	90	198	90	550	25	460	315	1025	339	1178	223

MODELS	Flow Rate (m³/h)*		Pressure (Pa)		Power		Inlet (mm)	Noise level (dBa)		Net Weight (kg)	RPM (rpm)	
	50 (Hz)	60 (Hz)	50 (Hz)	60 (Hz)	50 (Hz)	60 (Hz)		50 (Hz)	60 (Hz)		50 (Hz)	60 (Hz)
<b>GX250</b>	245	280	630	900	0,09	0,12	80	61,4	64,2	11	2810	3420
<b>GX500</b>	535	630	1040	1100	0,25	0,29	100	68,4	72,2	15	2835	3440
<b>GX1000</b>	1020	950	1520	1680	1,10	1,30	150	69,8	73,4	36	2885	3480
<b>GX2000</b>	1930	1760	1450	1850	1,50	1,75	150	74,4	75,6	41	2910	3510
<b>GX3000</b>	2300	2750	1500	2150	2,20	2,55	200	76,2	79,1	62	2910	3510

\* Free inlet.

**GALILEO**  
**EX<sup>TR</sup>A**



Health



Savings



Efficiency



Environment



Safety



**Losma SpA**

HQ:

Via E. Fermi, 16 - 24035 Curno - Bergamo  
Tel. +39 035 461444  
info@losma.it - www.losma.it



ISO 9001  
TUV Italia  
Certified  
Company



ISO 14001  
TUV Italia  
Certified  
Company



Authorised  
to use

**Losma SpA**

Turin office:

Via G. Brunero, 2 - 10077 San Maurizio Canavese - Torino  
Tel. +39 011 9278942  
info@losma.it - www.losma.it

**Losma GmbH**

Siemensstr. 14/3 - 71691 Freiberg am Neckar  
Tel. +49 7141 / 89971-10  
info@losma.de - www.losma.de

**Losma Inc.**

30A Wilson Drive - Sparta - NJ 07871  
Tel. +1 973 300 1044  
sales@losmausa.com - www.losma.com

**Losma UK Ltd.**

6 Strensham Business Park  
WR8 9JZ Strensham Worcestershire  
Tel. +44 1684 276527  
info@losma.co.uk - www.losma.co.uk

**Losma Pvt Ltd.**

Plot No 7A, Gat. No. 63, Shindewadi  
Tal: Bhor, District: Pune - 412205 - Maharashtra  
Tel. +91 92261 07775  
info@losma.in - www.losma.com