Master

Hydrostatic coolant filtration system

Master

Master is a range of high efficiency gravity filters, using non-woven fabric as filter media.

Master series is available in 4 models, able to manage flowrates from 200 to 1000 l/min of neat oil and from 400 to 2000 l/min of water based emulsion, contaminated by magnetic or non-magnetic particles.

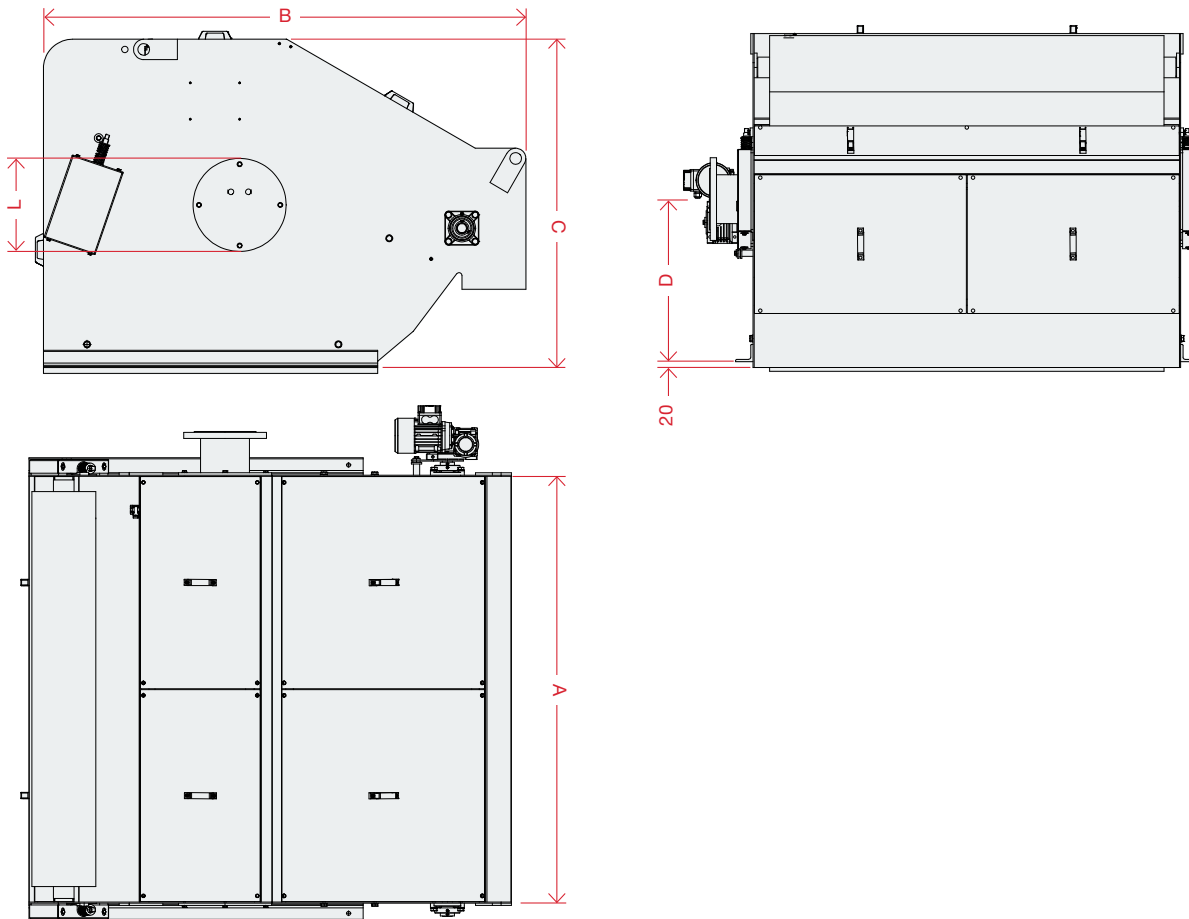Master's operation is simple and its efficiency is stable and constant.

This type of filter is suitable for cooling and lubricant liquids used in many industrial processes, such as: drawing, milling, polishing, grinding and washing amongst others.

ALL FILTERS ARE TESTED BEFORE DELIVERY

LOSMA guarantees that every single unit is individually tested through strict control procedures. Each unit is issued a test certificate for quality and function.

Technical data

MASTER	Dimensions (mm)					Weight (Kg)
	A	B	C	D	L	
AB 700	773	1660	1130	560	DN150 PN16	1200
AB 1000	1073	1660	1130	560	DN150 PN16	1500
AB 1400	1473	1660	1130	560	DN150 PN16	1800
AB 2000	2093	1660	1130	560	DN150 PN16	2100

MASTER	Flowrate l/min*			
	Grinding (emulsion)	Finishing grinding (oil)	Drawbench (emulsion)	Washing Machines, chip removal machine (emulsion)
AB 700	400	200	from 400 to 800	800
AB 1000	600	300	from 800 to 1200	1200
AB 1400	800	400	from 1200 to 1600	1600
AB 2000	1200	600	from 1600 to 2000	2000

* Flow rates data refers to emulsion with a max. oil concentration of 5% or neat oil with a max. viscosity of 20cst at 40°C, and with a filtering media having a weight not over 35g/m². Different characteristics of the coolant to be treated, pollutant typology and its concentration could considerably influence the filtration system's performances. Our Technical Dept. is available for studying the best solution for your requirements.

Medio-Master

Medio - Master is a high efficiency industrial coolant filtration system, available in 3 models able to treat from 150 to 200 l/min of neat oil and from 400 to 800 l/min of water based emulsion, contaminated by magnetic or non-magnetic particles.

Medio - Master grants very high coolant filtration levels based on customer's needs, thanks to the consumable filter media.
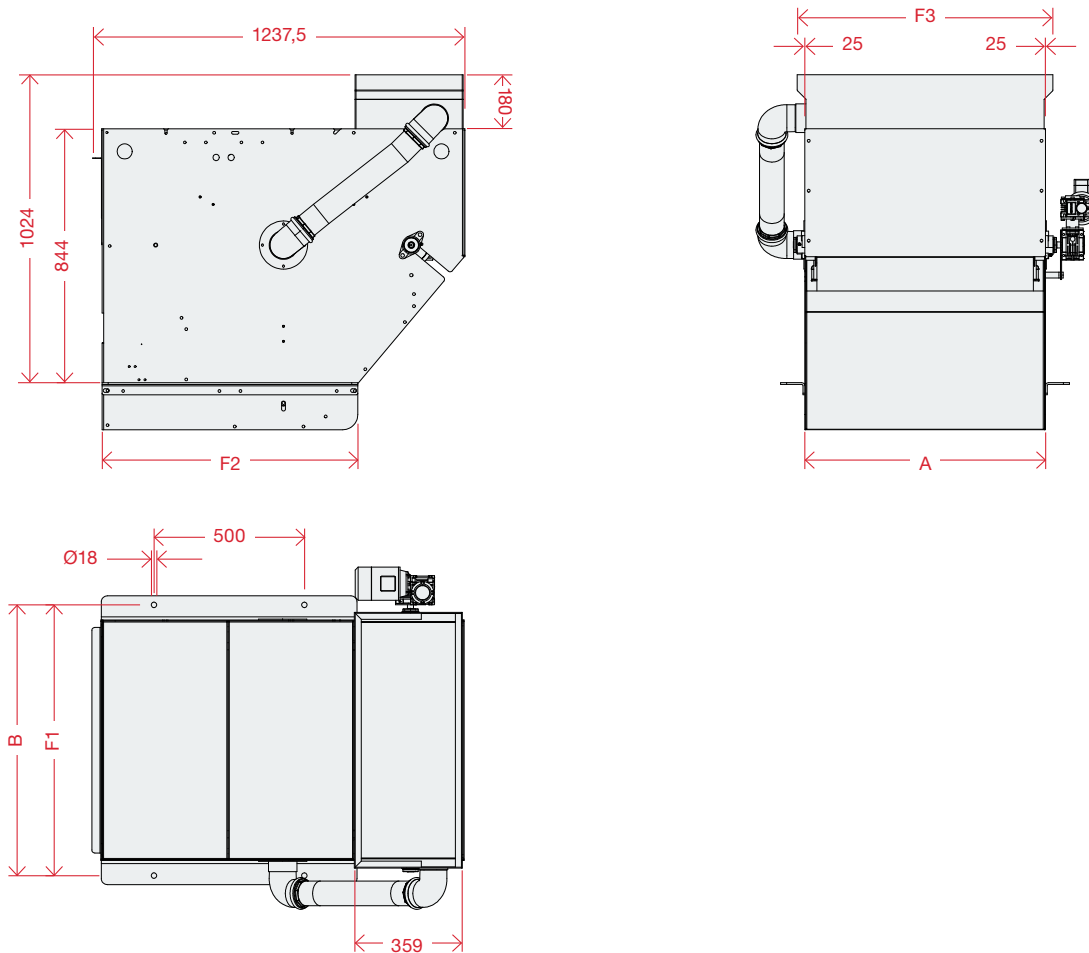
It is used in many industrial processes, such as: drawing, milling, polishing, grinding and washing.

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Technical data

MEDIO-MASTER	Dimensions (mm)					Weight (Kg)	Fabric width (mm)
			FILTER POSITIONING				
	A	B	F1	F2	F3		
Medio 600	800	960	900	850	850	250	740
Medio 800	1100	1260	1200	850	1150	270	1040
Medio 1200	1500	1660	1600	850	1550	310	1440

MEDIO-MASTER	Flowrate l/min*			
	Grinding (emulsion)	Finishing grinding (oil)	Drawbench (emulsion)	Washing Machines, chip removal machine (emulsion)
Medio 600	400	200	from 400 to 600	600
Medio 800	600	300	from 600 to 800	800
Medio 1200	800	400	from 800 to 1200	1200

* Flow rates data refers to emulsion with a max. oil concentration of 5% or neat oil with a max. viscosity of 20cst at 40°C, and with a filtering media having a weight not over 35g/m². Different characteristics of the coolant to be treated, pollutant typology and its concentration could considerably influence the filtration system's performances. Our Technical Dept. is available for studying the best solution for your requirements.

Mini-Master

Mini - Master series is composed of 3 models, able to filter from 60 to 200 l/min of neat oil and from 100 to 400 l/min of water based emulsion, contaminated by magnetic or non-magnetic particles.

Mini-Master has an optimum filtration level, thanks to the consumable filter media, which can be selected according to customer needs.
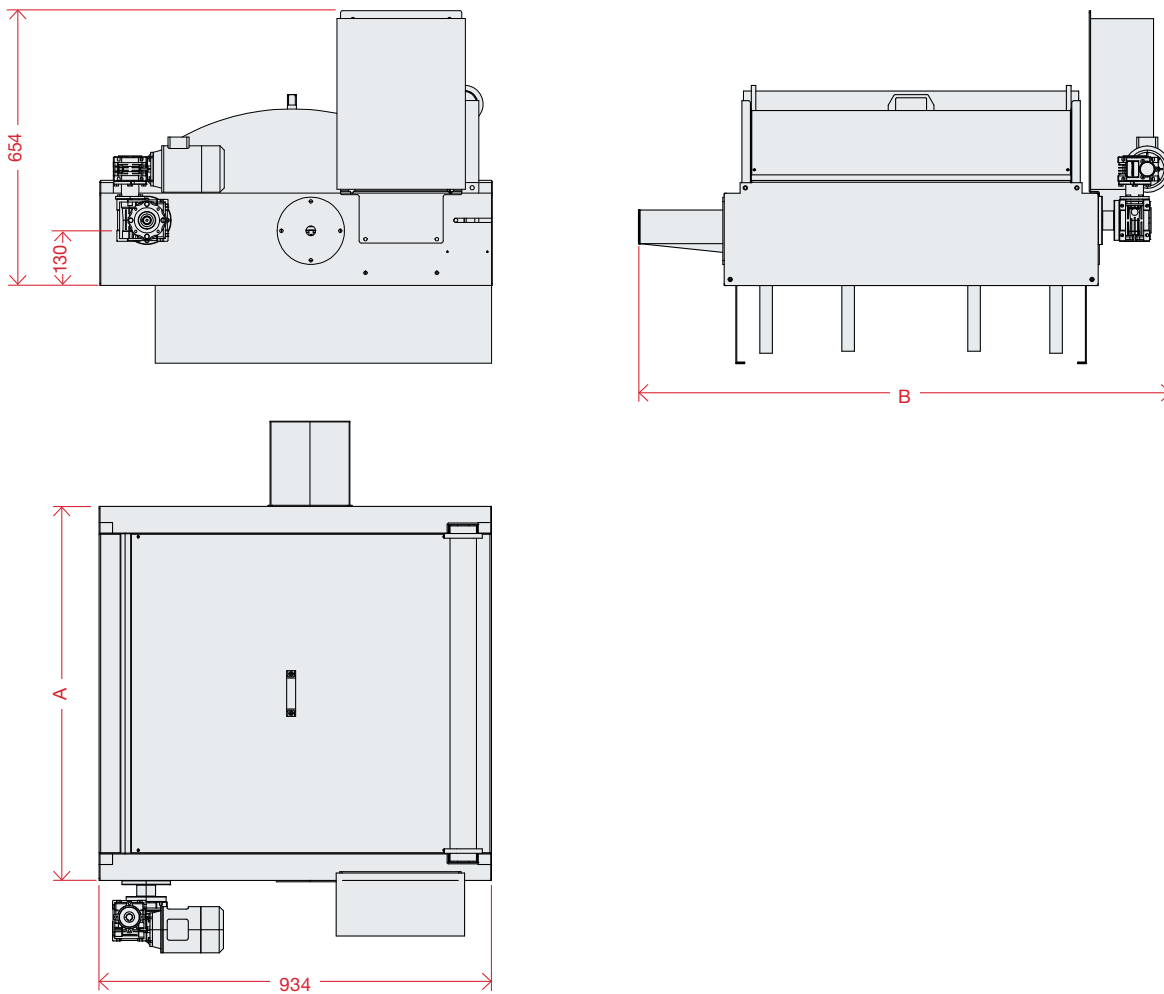
Its dimensions are significantly smaller and is used in many industrial processes, such as: drawing, milling, polishing, grinding, etc.

ALL FILTERS ARE TESTED BEFORE DELIVERY

LOSMA guarantees that every single unit is individually tested through strict control procedures. Each unit is issued a test certificate for quality and function.

LOSMA Liquid filters
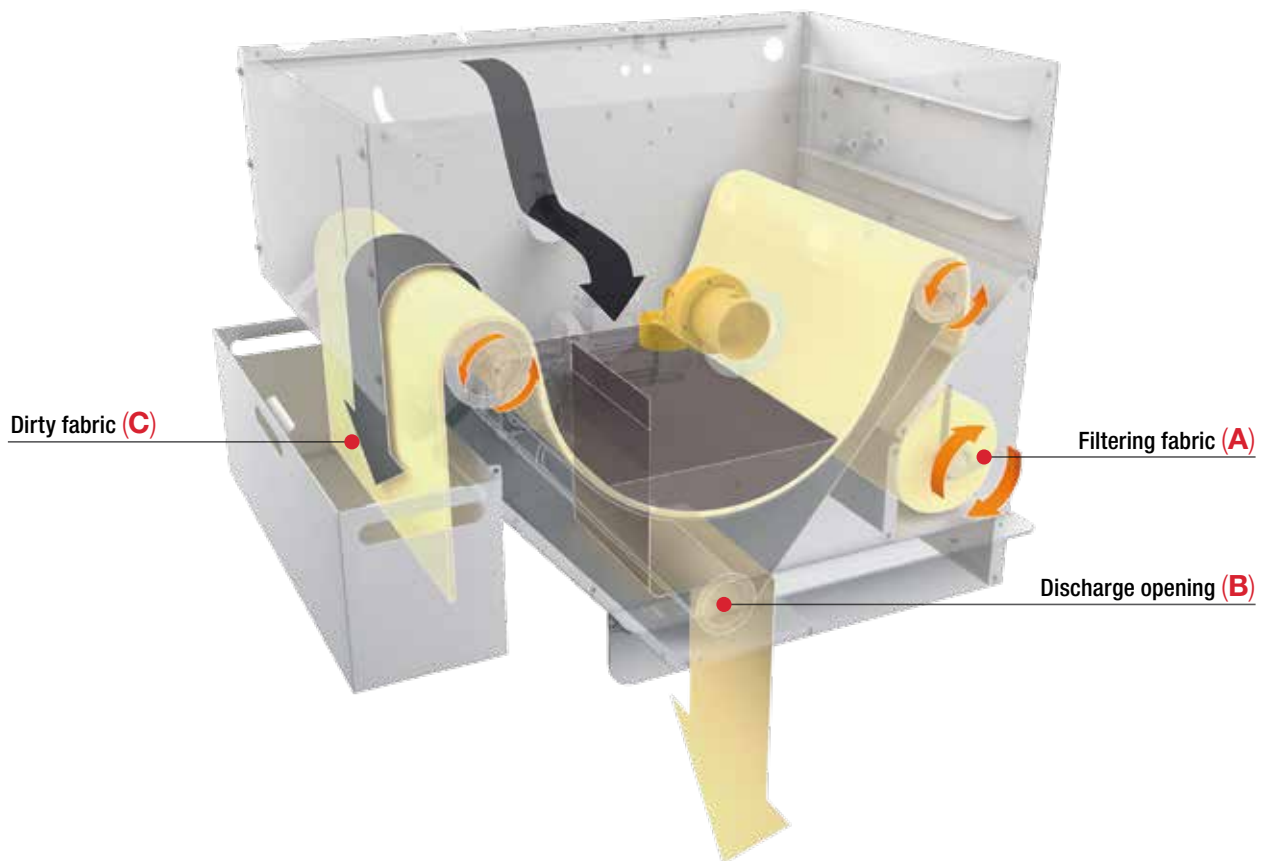
Technical data

MINI-MASTER	Dimensioni (mm)		Weight (Kg)	Fabric width (mm)
	A	B		
M	590	950	140	440
L	890	1250	260	740
XL	1190	1550	400	1040

MINI-MASTER	Flowrate l/min*			Washing Machines, chip removal machine (emulsion)
	Grinding (emulsion)	Finishing grinding (oil)	Drawbench (emulsion)	
M	100	60	from 100 to 150	150
L	200	100	from 200 to 300	300
XL	300	160	from 300 to 450	450

* Flow rates data refers to emulsion with a max. oil concentration of 5% or neat oil with a max. viscosity of 20cst at 40°C, and with a filtering media having a weight not over 35g/m². Different characteristics of the coolant to be treated, pollutant typology and its concentration could considerably influence the filtration system's performances. Our Technical Dept. is available for studying the best solution for your requirements.

Working principles

Dirty fabric (**C**)

Filtering fabric (**A**)

Discharge opening (**B**)

1 The filtering fabric (**A**), stretched inside the filter, is perfectly clean. The dirty liquid enters in the system and has to pass through it to go to the lower tank, thus depositing pollutant particles on its surface. The clean liquid goes through the lower part where the discharge opening (**B**) is located and falls into the tank underneath. During this phase the system is idle and the fabric is not advancing; pollutant which is deposited on the filter fabric forms the actual filtering layer, which in many applications can reach a thickness of 10 mm.

2 The dirty filter fabric permeability is reduced, because the dirty liquid continues to deposit the pollutant onto its surface, and the coolant level starts increasing. The filtration degree improves due to the thickness of the mud deposited on the filter fabric. During this phase the system is idle.

3 The liquid has reached its maximum level, at this stage the best possible filtration degree is actually reached. The longer the filter operates in this condition, the better the average filtration will be. The system is idle also in this phase.

4 When the fabric is totally obstructed and the liquid cannot pass through it anymore, the regeneration cycle begins. Motor reducer allow the system to rotate and moves the dirty filter fabric (**C**), while the clean one is introduced and permeability restored, allowing for the level to descend and return to intermediate condition 2.

LOSMA Liquid filters

Plus

CHAIN SYSTEM AND LATERAL SEAL DISCS

Master and Medio-Master are equipped with a corrugated chain and lateral discs, this system guarantees the perfect seal of contaminated liquid in the filtering section.

CUSTOMIZABLE FOR EVERY CUSTOMER NEED

This series' filter uses consumable filter media, which allows to change the filtration degree simply by changing the fabric type, always maintaining good results.

COMPACT

Compared to other flatbed filters of the same capacity, gravity filter Master's overall dimensions are significantly smaller and can achieve greater levels of filtration.

Optional

DMD

Pre- filtration system with rotating magnetic discs for the separation of magnetic polluting particles from coolant.

Skim

Superficial oil skimmer, it allows to lengthen coolant quality and eliminate odors generated by anaerobic bacteria.

Electrical panel

For powering the system, control and command all signals.

Pump

For pressure from 0,1 to 100 bar for returning clean liquid.

Collecting tank

For clean liquid collection to be sent back to the machine tool.

Transfer tank

To collect dirty liquid for feeding the filter.

Installations

| Health | Savings | Efficiency | Environment | Safety |

LOSMA®

WORKING CLEAN, BREATHING HEALTHY

Losma SpA - Via E. Fermi, 16
24035 Curno (BG) - Italia
Cap.Soc. I.V. Euro 500.000,00
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R.E.A. 185685

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