

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.

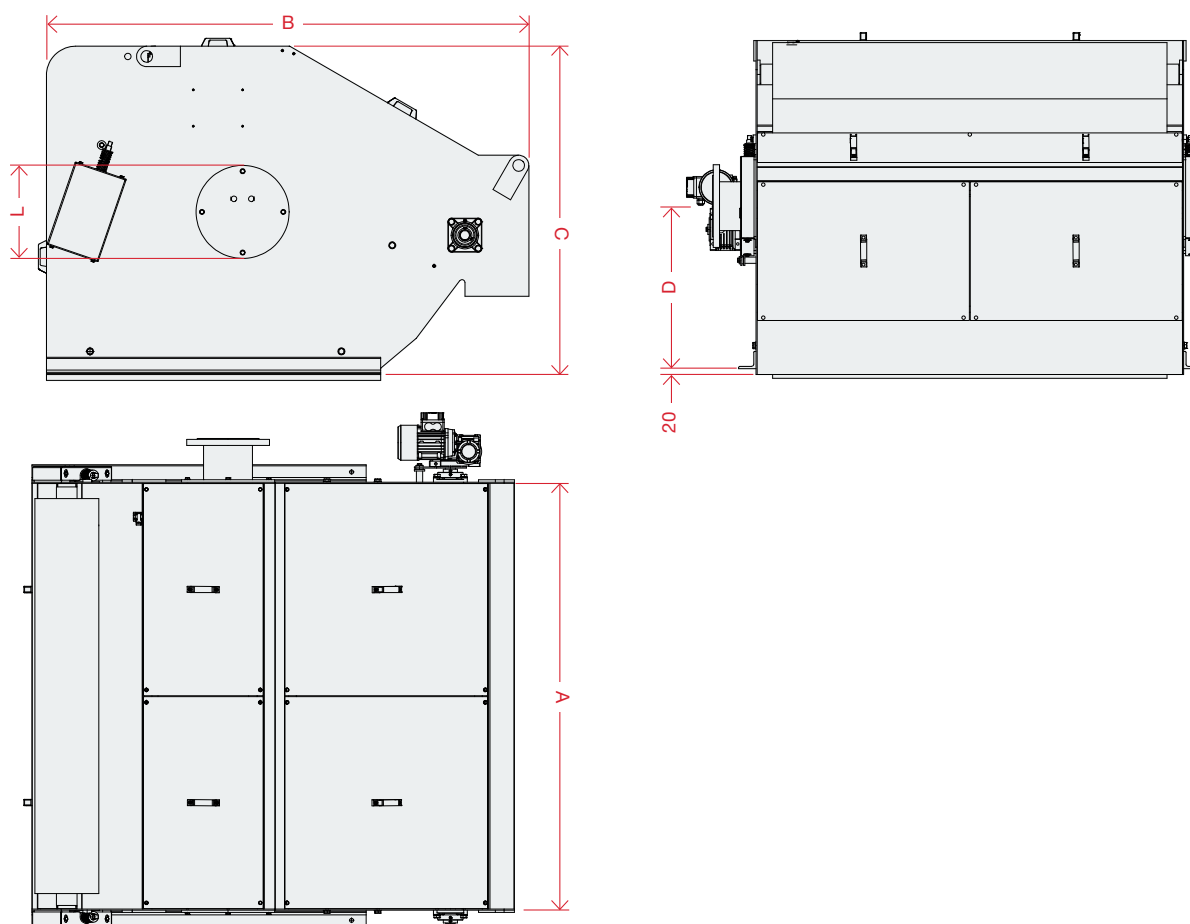
This type of filter is suitable for cooling and lubricant liquids used in many industrial processes, such as: drawing, milling, polishing, grinding and washing amongst others.



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.

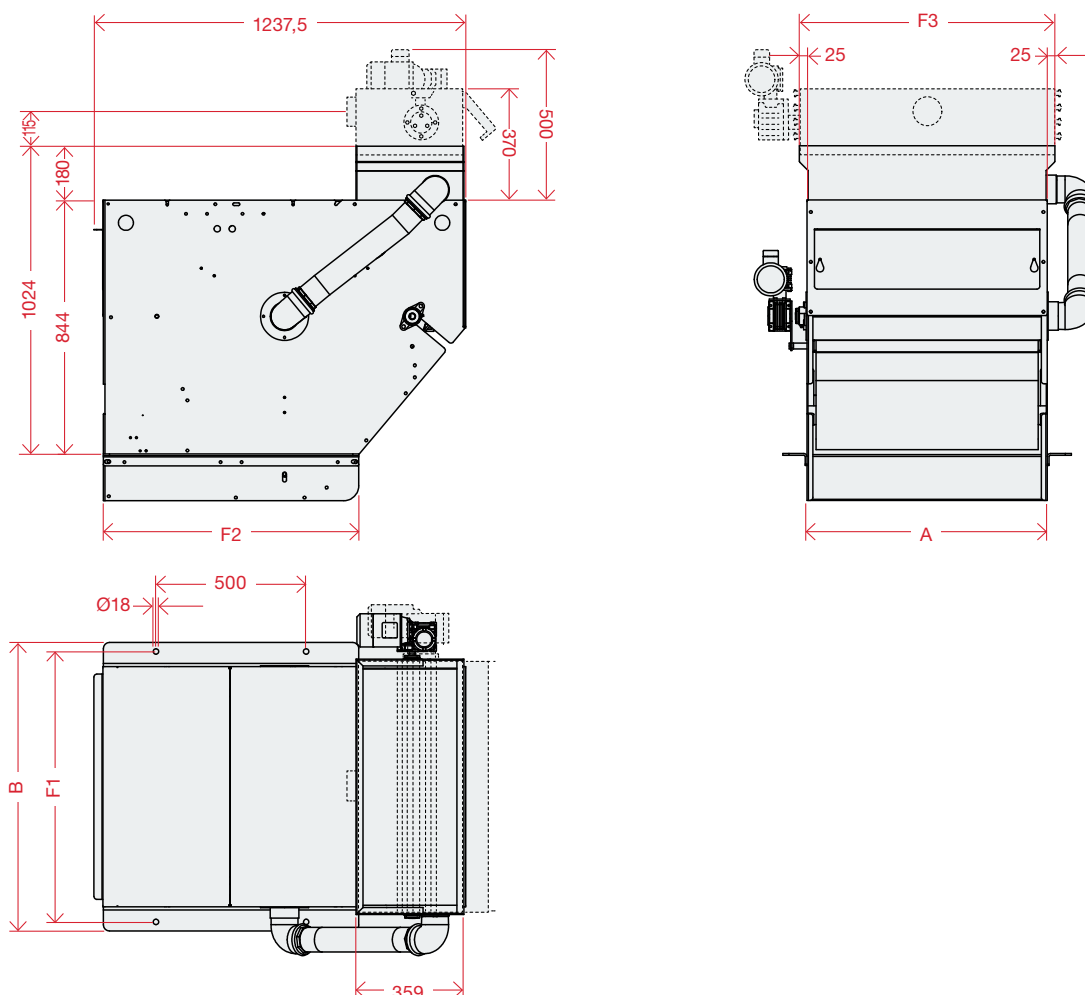
It is used in many industrial processes, such as: drawing, milling, polishing, grinding and washing.



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



| MEDIO-MASTER | Dimensions (mm) | | | | | Weight (Kg) | Fabric width (mm) |
|--------------|--------------------|------|------|-----|------|-------------|-------------------|
| | FILTER POSITIONING | | | | | | |
| | A | B | F1 | F2 | F3 | | |
| Medio 600 | 800 | 960 | 900 | 850 | 850 | 250 | 440 |
| Medio 800 | 1100 | 1260 | 1200 | 850 | 1150 | 270 | 740 |
| Medio 1200 | 1500 | 1660 | 1600 | 850 | 1550 | 310 | 1040 |

| 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.

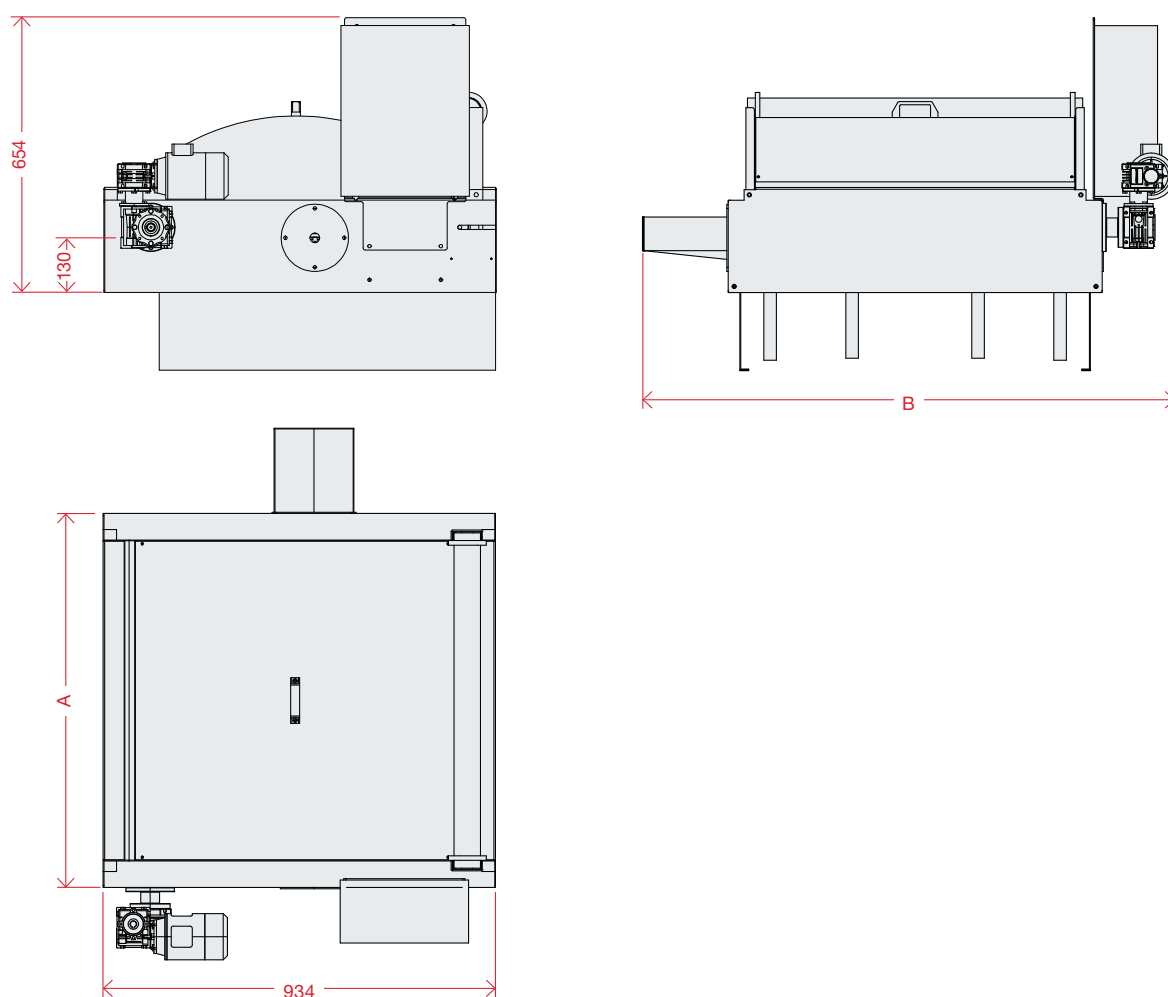
Its dimensions are significantly smaller and is used in many industrial processes, such as: drawing, milling, polishing, grinding, etc.



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

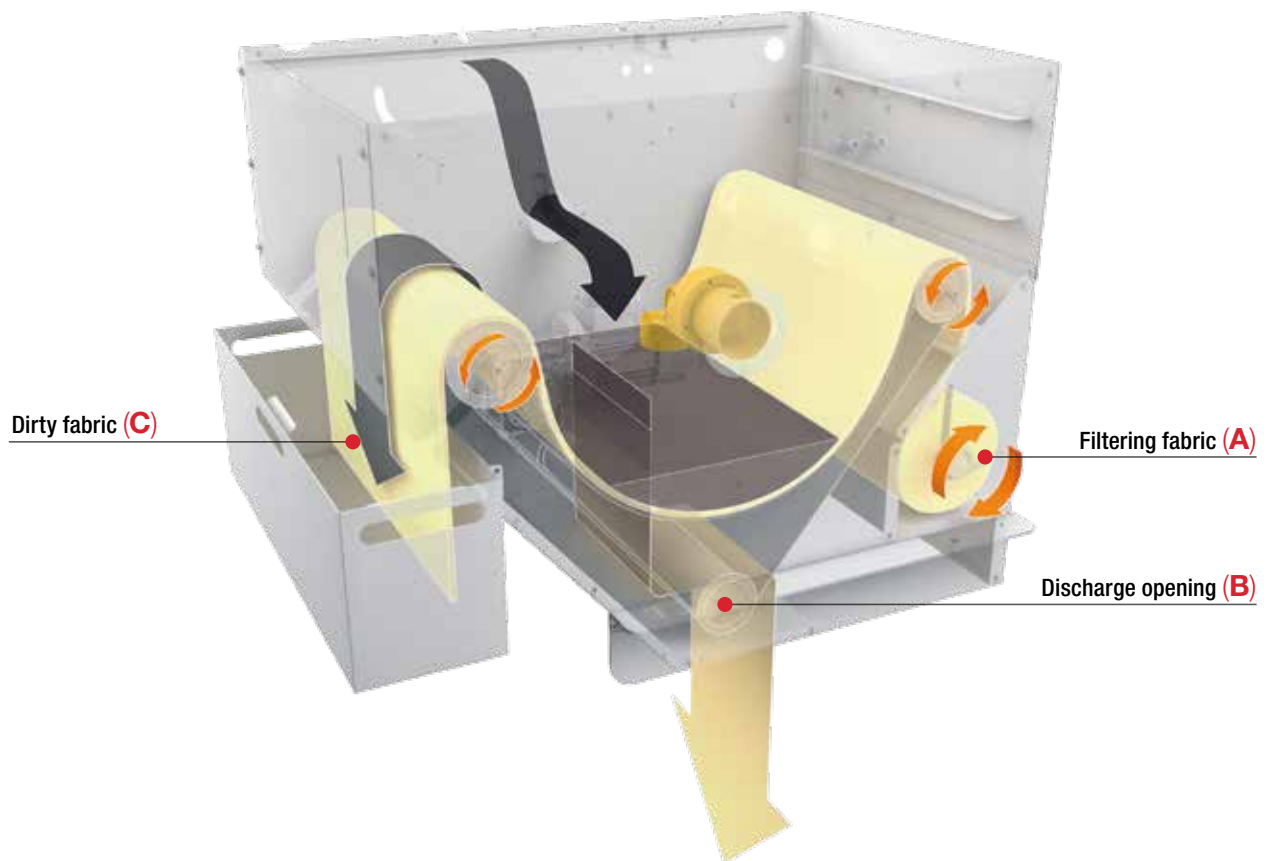


| MINI-MASTER | Dimensioni (mm) | | Weight (Kg) | Fabric width (mm) |
|-------------|-----------------|------|-------------|-------------------|
| | A | B | | |
| M | 590 | 950 | 140 | 440 |
| L | 890 | 1250 | 260 | 740 |
| XL | 1190 | 1550 | 400 | 1040 |

| MINI-MASTER | Flowrate l/min* | | | |
|-------------|---------------------|--------------------------|----------------------|---|
| | Grinding (emulsion) | Finishing grinding (oil) | Drawbench (emulsion) | Washing Machines, chip removal machine (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



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.

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

newtarget



Losma SpA - Via E. Fermi, 16
24035 Curno (BG) - Italia
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