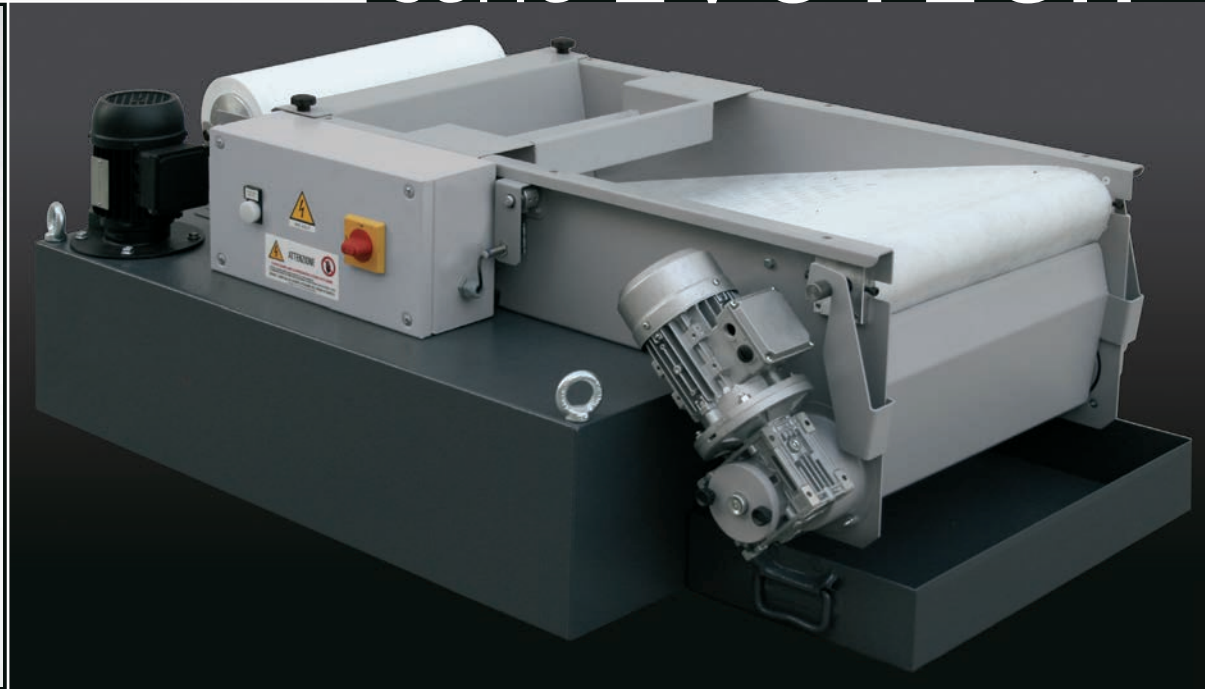




Micronfilter

FILTERING SOLUTIONS

serie **EVOTECH**®



The new "Evotech" series, evolution of the species!

English

EVOTECH[®]

The revolutionary EVOTECH deep bed coolant filters utilize innovative principles of operation and exclusive design concepts to provide the very highest level of performance without sacrificing any of the elements of reliability and versatility found in most indexing media systems available on the market today. Micronfilter EVOTECH series implements, on a small scale, the capitalization of the hydrostatic pressure concept, which allows to increase, using the same filtering surface, the flow rate and the efficiency, while reducing the filter fabric consumption. EVOTECH coolant filters are designed for use with all metalworking machines tools and are for filtering water based or oil based coolants with a maximum viscosity of 20 cSt at 40°C (104°F). The system is designed for flow rates between 30 to 600 l/min (8-158 gpm). A variety of filter fabrics are available to filter coolant ranging from 10 to 60 microns.

CONSTRUCTION CHARACTERISTICS

EVOTECH coolant filters are manufactured from a heavy galvanized sheet metal (stainless steel on request), are shaped and welded by a state of the art automated process. All EVOTECH coolant filters are finished with a high quality powder coating painting system.

The innovative construction consists of a frame with a perforated inclined filter bed, on which the filter fabric rests, a filtration zone and spent media rewinding system run by a geared motor. The system utilizes a float type liquid level switch which indexes the media forward when dirty. The media passes over a scraper blade to remove the sludge prior to being extracted into an exclusive patented spent media filter roll. To complete the unit, coolant tanks are supplied for the filtered coolant. An electric control panel brings the complete system together so that operation is automatic and operator free. If required, we can supply a variety of different coolant return pumps and options meet the specific needs of our customer's applications.

OPERATION PRINCIPLE

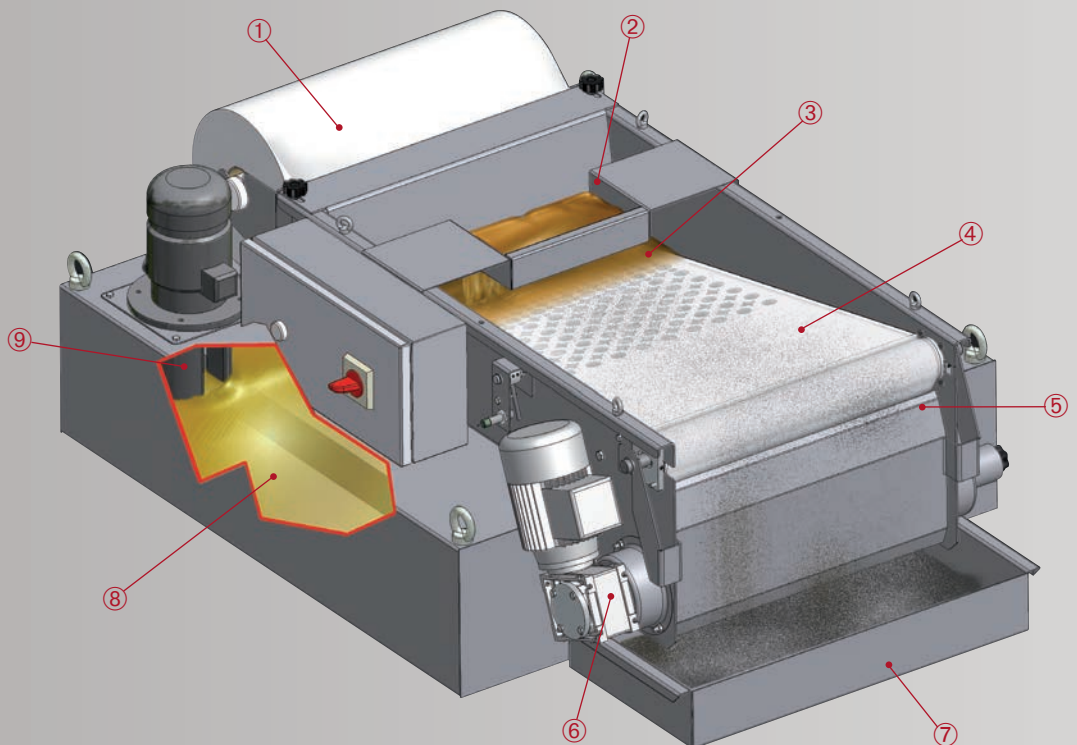
The liquid to be treated flows into the flow distribution trough, which allows the coolant to be evenly distributed on the fabric below. Due to the unique design of our special inclined deep filter bed, a high head pressure is built in the filtration zone and forces the solids to settle. A combination of liquid head pressure, the correct filter fabric and a layer of solids on the filter media creates a cake that improves the effectiveness of the filter media and provides a highly efficient use of filter the media. This unique design allows for the filter media to be fully loaded with solids and provides a significant savings in the quantity filter media used.

Once a significant amount of solids have accumulated on the filter media, the level of the liquid rises which causes the liquid level float to activate a proximity switch. Once the switch is activated, the geared motor pulls the new clean fabric forward and also rewinds the spent filter fabric on a spent media roll for easy disposal. As the media is being wound on the spent media roll, the fabric slowly passes over the higher section of filter bed, which allows the filter media to dewater and dries the collected sludge. As the fabric passes over the front edge, a scraper blade removes the partially dried sludge which falls by gravity into a sludge collection tank. The spent media is then wound onto a spent filter roll which allows the operator to quickly change out the spent media. The cleaned coolant flows by gravity into the coolant tank and depending on the application, is pumped back to the tool machine by an electric return pump.

Efficiency lower, fabric consumption, minimum disposal costs, all with very limited overall size.

EVOTECH[®]

WORKING PRINCIPLE





- ① ROLL OF FILTER FABRIC
- ② INLET AND DISTRIBUTION OF THE CONTAMINATED LIQUID
- ③ ZONE OF MAXIMUM ACCUMULATION OF THE CONTAMINANT
- ④ SLUDGE DRYING TRANSIT
- ⑤ PENDULUM SCRAPPER FOR SLUDGE SEPARATION
- ⑥ REWINDING SYSTEM OF THE SATURATED TISSUES
- ⑦ SLUDGE COLLECTION TANK
- ⑧ CLEAN LIQUID TANK
- ⑨ PUMP TO RECYCLE THE FILTERED LIQUID BACK TO THE MACHINE

THE CONTAMINATED LIQUID IS CONVEYED ONTO THE TROUGH THAT DISTRIBUTES IT UNIFORMLY ON THE FABRIC BELOW. THE PARTICULAR SHAPE OF THE INCLINED SLIDE, AT THE FIRST PART FORMS A COLUMN OF WATER WITH A DEEP HEAD WHERE THE CONTAMINANT DEPOSITS. THE SLUDGE PASSES THROUGH A DRYING PHASE BEFORE BEING SEPARATED FROM THE FILTERING MATERIAL.



QUICK AND EASY SUBSTITUTION OF THE FILTERING MATERIAL



- Unhook the sludge separator
- Unscrew the roll holder knob
- Rewind the fabric
- Unhook the roll





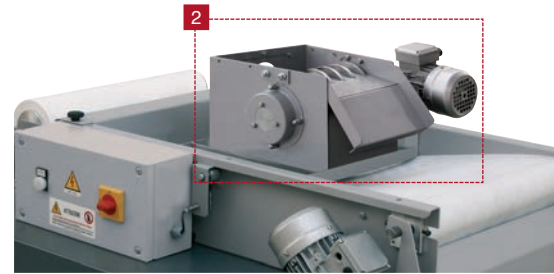
EVOTECH[®]

OPTIONALS

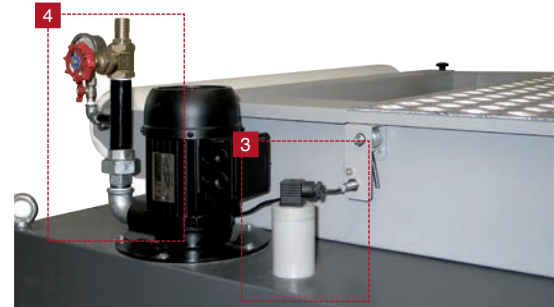
1 EVOTECH IN STAINLESS STEEL



2 THE "KALAMIT" MAGNETIC SEPARATOR.
All the models of the Evotech serie can be equipped with the "Kalamit" unit.

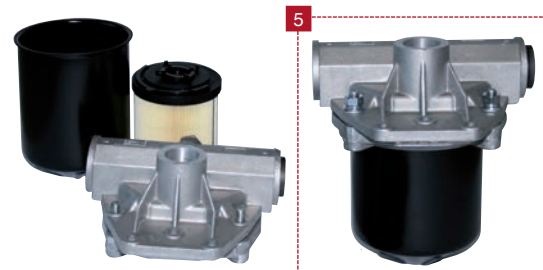


3 LEVELS OF LIQUID MANAGEMENT IN THE TANK

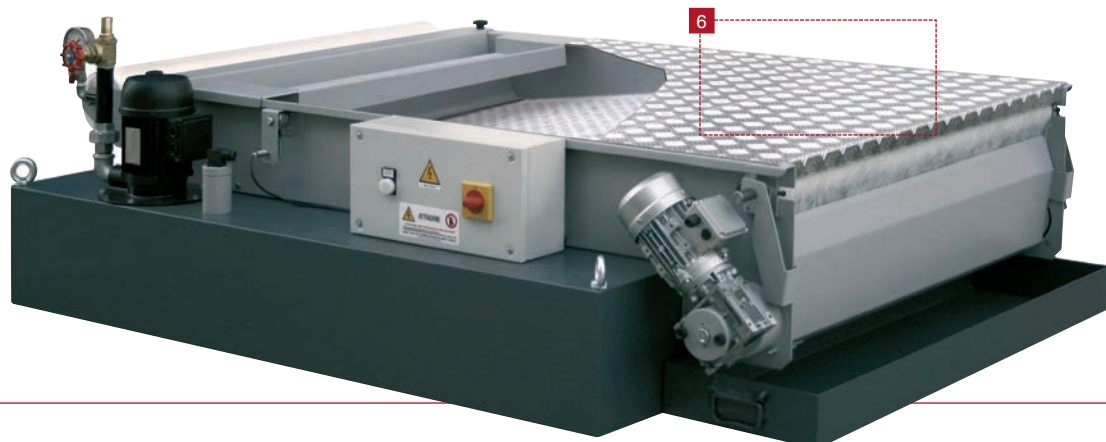


4 HYDRAULIC COMPONENTS

5 POST-FILTRATION CARTRIDGES

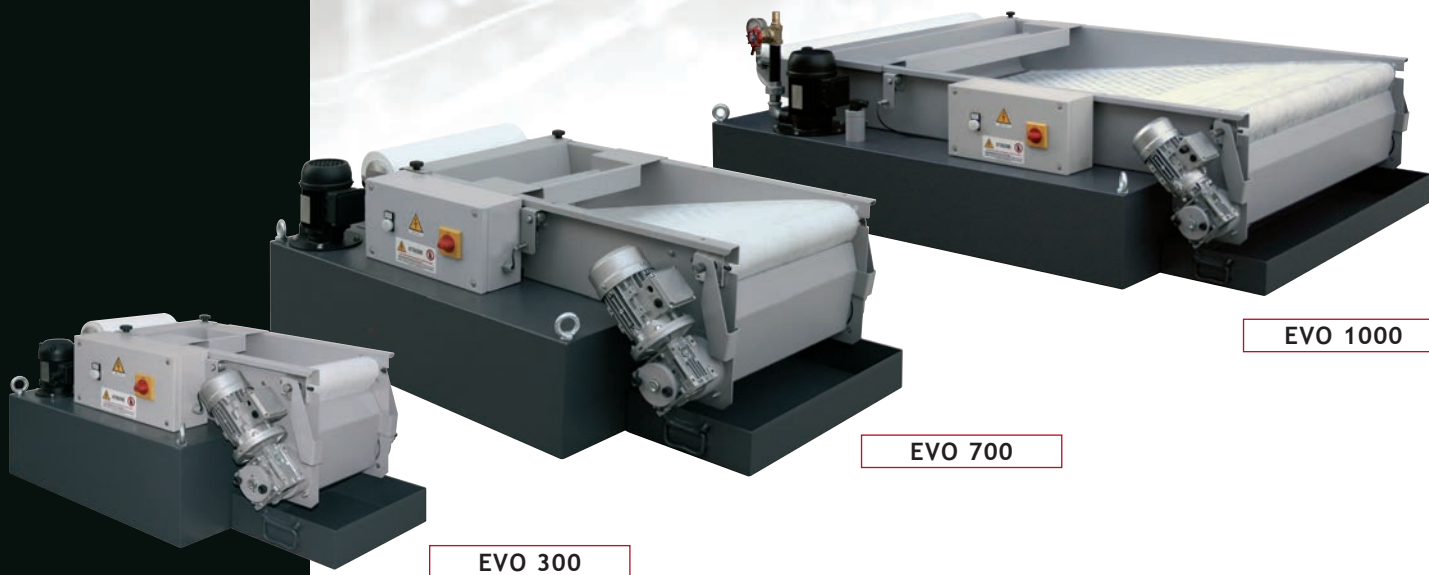


6 WALK OVER COVER



EVOTECH[®]

TECHNICAL FEATURES

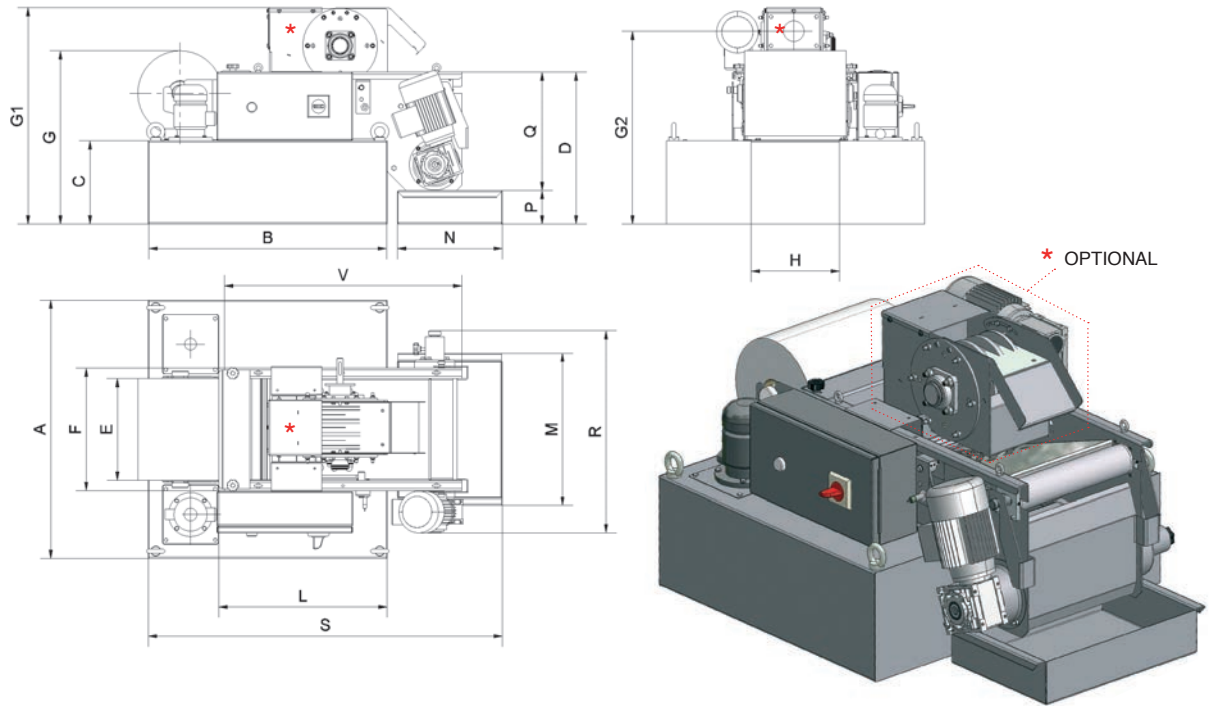


TECHNICAL FEATURES

Model	Tank Capacity	Emulsion Flow (Capacity)	Entire Oil Flow (Capacity)	Total Head	Pump Power	Geared Motor Power	Weight
	l.-Gal	l./min.-GPM	l./min.-GPM	bar	kW	kW	kg
EVO 300	135-35	40-10	20-5	0,2	0,16	0,12	71
EVO 500	240-63	80-21	40-10	0,2	0,30	0,12	114
EVO 700	465-122	140-36	70-18	0,2	0,40	0,12	163
EVO 1000	610-161	220-58	110-29	0,2	0,53	0,12	197
EVO 1200	770-203	280-73	140-36	0,2	1,15	0,12	237
EVO 1500	1150-303	350-92	175-46	0,2	1,47	0,12	302

The nominal flow data are based on fluids having a maximum viscosity of 20 cSt at 40° C and a filtering medium with specific weight of 35 g./sq.m. Different properties of the contaminated liquid, of the contaminant and of the relative concentration, and also the type of filtering fabric, can significantly influence the performance of the cleaner. Our engineering office is at your service to help you select the best solution to satisfy your requirements.





DIMENSIONS FEATURES

EVO 300 EVO 500 EVO 700 EVO 1000 EVO 1200 EVO 1500

	EVO 300	EVO 500	EVO 700	EVO 1000	EVO 1200	EVO 1500
A	760	960	1250	1620	2050	2000
B	700	1000	1500	1500	1500	1500
C	250	250	250	250	250	350
D	450	450	450	450	450	550
E	300	500	700	1000	1200	1500
F	360	560	760	1060	1260	1560
G	510	510	510	510	510	610
* G1	670	670	670	670	670	770
* G2	600	600	600	600	600	700
H	260	460	660	860	1160	1460
L	480	730	880	1030	1080	1210
M	450	650	850	1150	1350	1650
N	310	310	310	310	310	310
P	100	100	100	100	100	100
Q	350	350	350	350	350	350
R	580	780	980	1280	1480	1780
S	1010	1310	1810	1810	1810	1810
T	960	1210	1360	1510	1560	1690
V	700	950	1100	1250	1300	1430

DIMENSIONS (mm)

Values on this catalogue are indicative and can be subject to modification and improvements. MICRONFILTER s.r.l reserves the right to change them without previous advice.



Montfort International est le distributeur exclusif au Québec et dans les provinces de l'Atlantiques des produits de MicronFilterUSA.

Montfort International is the exclusive distributor for MicronFilterUSA products in Quebec and Atlantic Provinces.

2500, avenue Watt, Ville de Québec (Qc), G1P 3T3, Canada



1-800-463-6668 | (418) 877-0778



info@montfort-international.com



www.montfort-international.com



Micronfilter S.r.l.

www.micronfilter.it

www.micronfilterusa.com

.micronfilter.de