

## Micro Drum Filters

flow rates	filtration degrees	water for cleaning	minimum operating pressure
up to <b>4000 m<sup>3</sup>/h</b> (17600 US gpm)	<b>3000-10</b> micron	less than <b>1%</b> of the total flow	Atmospheric pressure



### features:

- Filtration without flow interruption
- Filtration degree from 10 micron to 3000 micron
- Manufacturing programme 1 m<sup>3</sup>/h - 4500 m<sup>3</sup>/h
- No need for pressure
- Available in stainless steel 304, 316, 316L
- Very low water loss
- Applications : Water and waste water treatment , water supply systems, irrigation, cooling towers, pre-filtration systems, manufacturing, industry, aquaculture



## industry

Automotive, Aviation, Ballast treatment, Electronics, Food & Beverage; Mining, Oil & Gas, Petrochemical, Power Generation, Pulp & Paper



## municipal

Potable Water, Waste Water, Desalination, Brackish Water, High rise buildings, Pre-filtration to Membranes



## irrigation

Agriculture, Golf & Turf, Aquaculture, Green Houses

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### Factory

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## Flow Capacities

	Filtration Degree (µm)	Maximum Flow Capacities (m <sup>3</sup> /h)										
		501	801	802	804	1202	1204	1402	1404	1602	1604	1606
Dirt Load Maximum 10 mg/L SS	38	15	35	90	180	125	250	145	285	160	325	485
	50	35	70	145	285	215	430	235	470	360	575	865
	80	70	140	285	575	430	865	450	900	575	1.150	1.725
	100	90	180	360	720	560	1.115	575	1.150	740	1.475	2.215
Dirt Load Maximum 25 mg/L SS	38	10	25	70	140	100	200	110	225	125	260	380
	50	25	55	110	225	170	340	185	375	285	460	690
	80	55	110	225	460	340	690	360	720	460	920	1.380
	100	70	140	285	575	440	890	460	920	590	1.180	1.770
Dirt Load Maximum 40 mg/L SS	38	3,5	5	15	35	25	50	25	55	30	65	95
	50	5	10	25	55	40	85	45	90	70	115	170
	80	10	25	55	115	85	170	90	180	115	230	345
	100	15	35	70	140	110	220	115	230	145	295	440

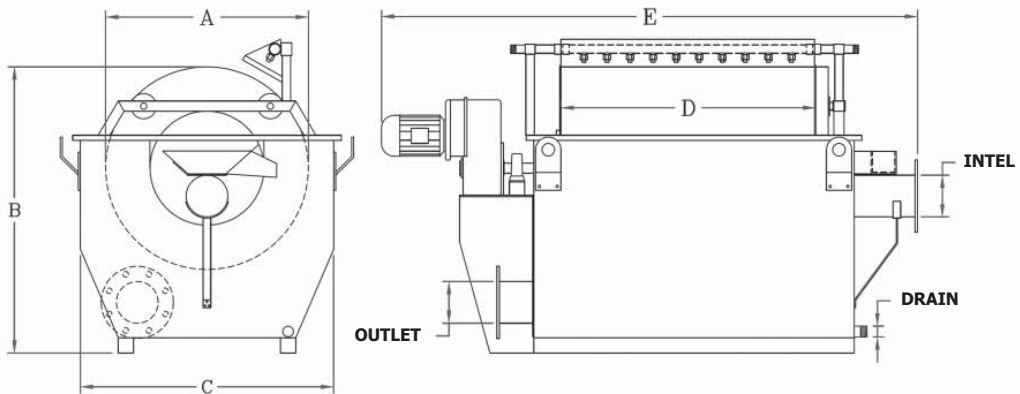
\* The capacities are only for information and they can be change when dirt load changes.  
For different dirt loads please contact us.

## Technical Specifications

Motor Power (kW)	0,25	0,37	0,75	1,10	1,50	1,50	2,20	2,20	2,20	2,20	3,0
Water consumptain for flushing (at 4 bar)	0,75	0,76	1,52	3,04	1,52	3,04	1,52	1,52	1,52	3,04	4,56
Filtration Area (m <sup>2</sup> )	0,70	1,20	2,40	4,80	4,20	7,00	4,20	4,80	4,80	9,60	14,30

## Dimensions

TYPE	501	801	802	804	1202	1204	1402	1404	1602	1604	1606
A	Ø500	Ø800	Ø800	Ø800	Ø1200	Ø1200	Ø1400	Ø1400	Ø1600	Ø1600	Ø1600
B	750	1.130	1.130	1.130	1.590	1.660	1.880	1.880	2.160	2.160	2.160
C	700	1.000	1.000	1.000	1.540	1.540	1.740	1.740	2.060	2.060	2.060
D	500	500	1.000	2.000	1.000	2.000	1.000	2.000	1.000	2.000	3.000
E	1.550	1.580	2.115	3.235	2.300	3.280	2.335	3.335	2.685	3.685	4.685
INTEL / OUTLET	DN100	DN125	DN150	DN200	DN200	DN250	DN250	DN300	DN350	DN350	DN350
DRAIN	1"	1"	1"	1"	1"	1 ½"	2"	2"	2"	2"	2"



\* Dimensions are subject to change without prior notice

## General Specifications

### Working Principle

Micro drum filters are mechanical, self cleaning filters. Water or process liquid flow gravity fed, from the inside to the outside of the slowly rotating filter drum. The solids and contamination will stick to the inner surface of the drum. In the rotating movement the parts are back flushed with the help of built in high pressure spray nozzles and collected in a tray. This action avoids the breaking down of soft organic particles and enhances the filtration efficiency.

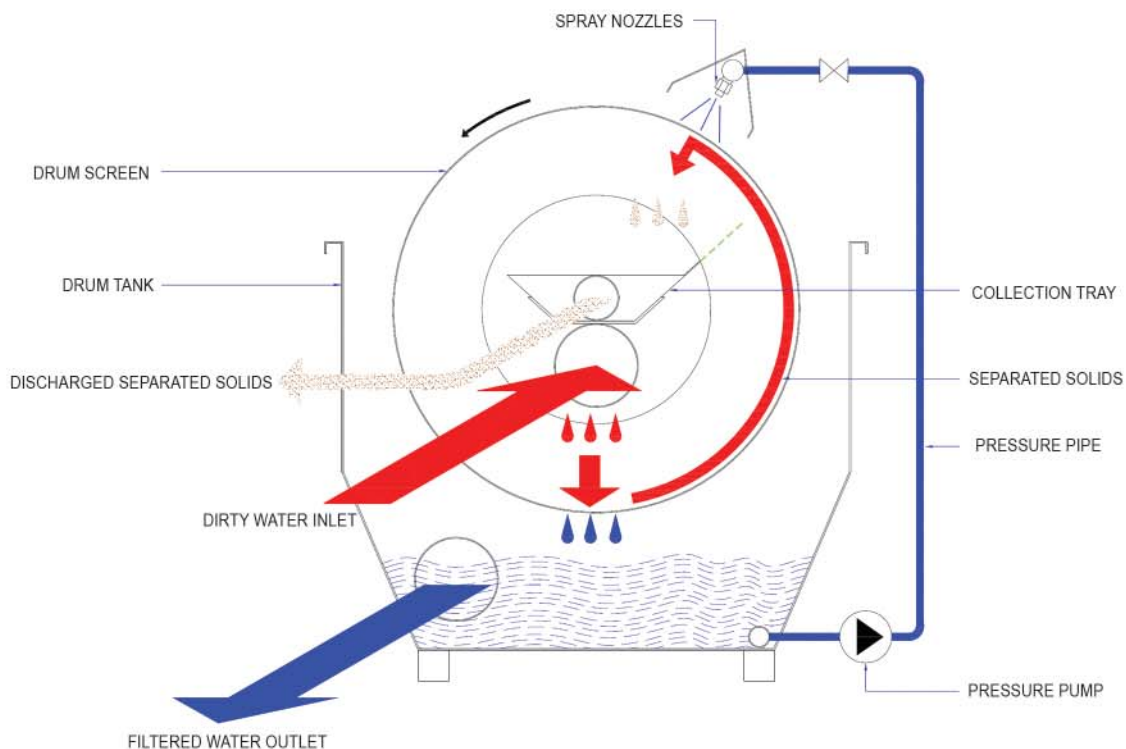
### The Filtering And Flushing Process

Water to be filtered enters the inside of the drum. The water is filtered through the drum's filter screen. The difference in water level inside/outside the drum provides the driving force for the sieving. Solids are trapped on the filter screen and lifted to the backwash area by the rotation of the drum. The drum rotation is intermittent or continuous depending on the type of control. Water from rinse nozzles is sprayed from the outside of the filter screen. The rejected material is washed out of the filter screen into the sludge tray. Rejected sludge flows together with water out of the filter using gravity.

### Properties And Options

The drum filters are available in;

Tank type with or without lid, without tank, frame type, with pressure pipe and pump, Variable rotation speed special applications.



## Control System

Micro drum filters may work with the below given settings;

- Continuous rotation
- Timer control
- Water level control
- External pressured water control



“ FRAME TYPE ”



“ TANK TYPE WITH LID ”

## Benefits

- Works with atmospheric pressure
- Saves energy and water
- Easy operate and maintenance
- Very low maintenance
- Heavy duty applications
- No risk for blocking
- Remote control possibility

## Applications



Turkey  
Filtration of process water at fruit juice factory



Germany  
Power generation plant waste water treatment system outlet water filtration



England  
Filtration of frozen vegetables process water for recycling



Belquim  
Storm water filtration