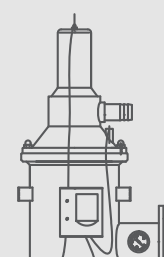
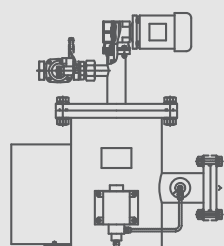
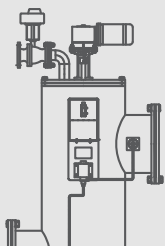
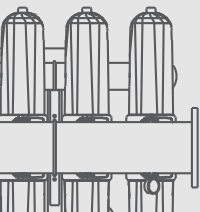
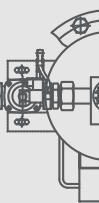
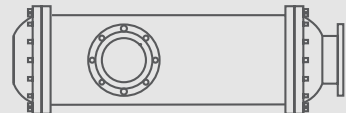
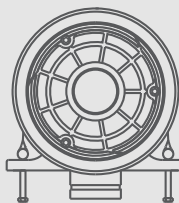
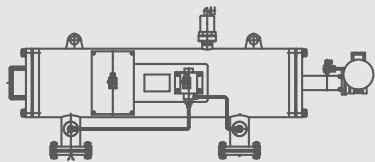
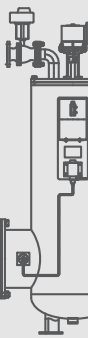
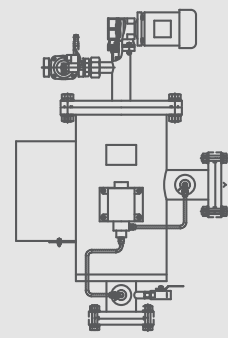
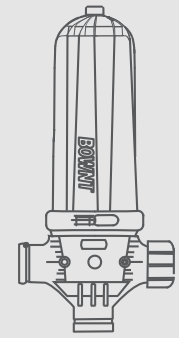
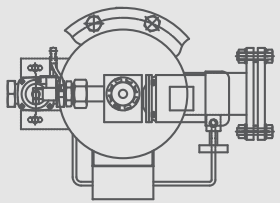
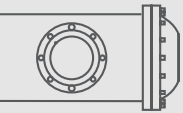
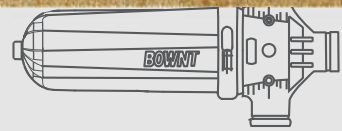
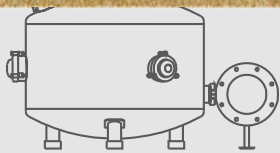
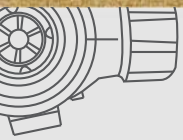




BOWNT

BOWNT-BOM



BOWNT-BOM

Description:

BOWNT-BOM Media Filter has a unique internal design, which can ensure stable filtering and good filtration effect. Backwashing efficiency is greatly improved because of the high efficiency inner loop. Compared with conventional sand filter, BOWNT-BOM has distinct advantages on efficiency, automation degree, water consumption and space occupation, backwashing cycle can be activated by the differential pressure, time or manual control.



Application:

Industrial cooling tower water bypass filtration, low turbidity (100mg/L) sewage treatment, desalination and water reuse pre-treatment etc.

Structure characteristics :

BOWNT-BOM is designed with removable end covers on the top and bottom of the filter. The bottom one is used for installing and adjusting the water collectors and emptying and maintaining filter materials. The top one is used for adding filter material and checking the internal filtering situation. Leakage-proof design of end covers is based on the principle of water sealing, which is more safe and reliable.

Special design of umbrella-shaped pressure compensation water collectors ensures a pressure balance for all parts during filtration, high flow velocity and efficiency; inner loop during the backwashing cycle attributes to a good backwash effect and lower water consumption.

Feed water can be uniformly distributed to the cavity through the filter diffuser even under high flow velocity, greatly improved of filtration effect.

Filter housing is made of sturdy steel, precision welding with internal&external anti-corrosive painting(rubber liner or plastic coating), pressure up to 145psi(1Mpa).

Characteristics:

Unique tank filter units, and stable performance.

BOWNT BOM filters with modular design, flexible combination of multi-units to meet with different flow rate, space and installation requirements.

BOWNT BOM filters can activate backwashing cycle by time, pressure differential, manual control and other modes, backwashing cycle with no interruption of filtration.

BOWNT BOM filter forms a inner loop during backwashing cycle, higher efficiency, shorter backwashing time and lower water consumption (the backwashing water consumption is about 1/3 of the traditional sand filter).

Easy installation and free of complicated lifting device.

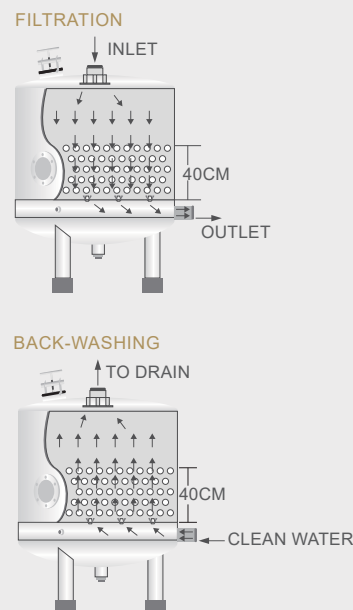
BOWNT Media Filter with smaller space occupied, filter units can be flexible arrayed to meet with the local conditions. Low at weight, suitable for normal concrete ground, no need for a special basement.

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Working Principle

BOWNT BOM filter consists of several filter units; feed flow enters the filter units for filtration through the three-way valves (connect the feed line to the filter units and close the drain line), produced water after filtration converges into the discharge line. Water fills into the internal filter media smoothly through the diffuser, then impurities intercepted. Several of umbrella-shaped water collectors at the bottom of the filter uniformly collect and discharge the filtered water. BOWNT BOM filter adopts advection filtration, which realizes a better filtration effect at high flow velocity.

While filter head loss is increasing due to the accumulation of impurities in the filter media surface, filter automatically switches into backwashing cycle to clean up the impurities. The control unit sends a signal to the solenoid valve of the first filter unit, and the solenoid valve is activated under the water pressure to cut off the feed line and connect the filter unit to the drain line. At this point, filtered water back flushes the filter media in a high speed under the back pressure, then the waste water is discharged from the drain line. Special designed water collectors form a inner loop in the filter media during backwashing, filter media rubs against each other to maximumly increase the backwashing frequency and reduces water consumption, without sand leakage during backwashing. Once finished the backwashing cycle, valve returns to the filtering status, and next filter unit goes on with backwashing cycle.



Shallow sand filter

Model	Max.Flow (gpm) (m³/h)	Filter Housing Diameter (inch) (mm)	Inlet/outlet Diameter	Drainage Valve	Max. Working Pressure (psi) (Mpa)	Water Consumption (gpm) (m³/h)	Dry Weight (kg)
BOM SF20	44 10	20" 500	2"	2"	87 0.6	35 8	50
BOM SF30	88 20	30" 750	3"	3"	87 0.6	80 18	130
BOM SF36	124 28	36" 900	3"	3"	87 0.6	110 25	200
BOM SF42	158 36	42" 1050	3"	3"	87 0.6	154 35	250
BOM SF48	220 50	48" 1200	4"	4"	87 0.6	198 45	300
BOM SF60	264 60	60" 1500	4"	4"	87 0.6	330 75	400

Feed water quality: SS≤30mg/L

Output water quality:SS≤5mg/L

Backwashing water consumption:< 1% of feed flow

Min. backwashing pressure: ≥29psi (0.2MPa)

Backwashing : with internal flow(except single unit)

Control : time and pressure differential

Filter units can be assembled to meet with large flowrate, please consult our company for specific conditions.

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Multi-layer media filter

Model	Max.Flow (gpm) (m ³ /h)	Filter Housing Diameter (inch) (mm)	Max. Working Pressure (psi) (Mpa)	Height (inch) (mm)	Weight (t)
BOM DSA400-C	6.6 1.5	16" 400	87 0.6	63" 1600	0.8
BOM DSA800-C	26.4 6	32" 800	87 0.6	63" 1600	0.9
BOM DSA1000-C	41.8 9.5	40" 1000	87 0.6	122.4" 3110	1.3
BOM DSA1250-C	66 15	50" 1250	87 0.6	128" 3251	2.1
BOM DSA1600-C	105.6 24	64" 1600	87 0.6	135" 3427	2.5
BOM DSA2000-C	167.2 38	80" 2000	87 0.6	144.2" 3665	3.2
BOM DSA2200-C	202.4 46	88" 2200	87 0.6	148.3" 3769	4.2
BOM DSA2500-C	259.6 59	100" 2500	87 0.6	158.3" 4021	4.6
BOM DSA3000-C	368.6 84	120" 3000	87 0.6	164.4" 4177	7.5
BOM DSA3200-C	422.4 96	128" 3200	87 0.6	172.3" 4377	7.8

DSA-double-layers quartz sand + anthracite

Standard body material C=carbon steel, optional for S=stainless steel and F=fiber glass

Single-layer media filter

Model	Max. Flow (gpm) (m ³ /h)	Filter Housing Diameter (inch) (mm)	Max. Working Pressure (psi) (Mpa)	Height (inch) (mm)	Weight (t)
BOM SS400-C	4.4 1	16" 400	87 0.6	63" 1600	0.8
BOM SS800-C	17.6 4	32" 800	87 0.6	63" 1600	0.9
BOM SS1000-C	28 6.4	40" 1000	87 0.6	122.4" 3110	1.07
BOM SS1250-C	44 9.8	50" 1250	87 0.6	128" 3251	1.5
BOM SS1600-C	70 16	64" 1600	87 0.6	135" 3427	2.1
BOM SS2000-C	110 25	80" 2000	87 0.6	144.2" 3665	3.3
BOM SS2200-C	132 30	88" 2200	87 0.6	148.3" 3769	4.1
BOM SS2500-C	176 40	100" 2500	87 0.6	158.3" 4021	5.3

BOM SS3000-C	246 56	120" 3000	87 0.6	164.4" 4177	7.6
BOM SS3200-C	282 64	128" 3200	87 0.6	172.3" 4377	8.2
BOM SC400-C	4.4 1	16" 400	87 0.6	63" 1600	0.9
BOM SC800-C	22 5	32" 800	87 0.6	154.2" 3918	1.2
BOM SC1000-C	35 8	40" 1000	87 0.6	181.7" 4616	1.5
BOM SC1250-C	52 12	50" 1250	87 0.6	184.6" 4691	1.8
BOM SC1600-C	88 20	64" 1600	87 0.6	187.6" 4766	2.6
BOM SC2000-C	135 31	80" 2000	87 0.6	196.7" 4996	3.9
BOM SC2200-C	162 37	88" 2200	87 0.6	201.3" 5114	4.6
BOM SC2500-C	216 49	100" 2500	87 0.6	217.3" 5521	6.3
BOM SC3000-C	308 70	120" 3000	87 0.6	223.5" 5677	8.5
BOM SC3200-C	352 80	128" 3200	87 0.6	231.4" 5877	9.5

SS-single layer quartz sand SC-single layer activated carbon

Standard body material C=carbon steel, optional for S=stainless steel and F=fiber glass

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