

VORTISAND®

HIGH PERFORMANCE FILTERS FOR SWIMMING POOLS



**CONVENTIONAL
SAND FILTER**



**2 MICRON
AUTOMATED
VORTISAND
FILTER**

The most important element in a pool is the filtration system. Efficient filtration means crystal clear water and comfort for swimmers.

Fast horizontal filters have recently appeared on the market. Poor water distribution, channeling inside the filter and the use of sand as the sole filter medium often makes them inefficient and costly.

VORTISAND, with its proven technology, is the ideal solution to pool filtration. Because of its unique design, which removes particles as tiny as 2 microns (nominal), construction based on multimedia filters and automated operation, VORTISAND is in a class of its own.

Just look at the following benefits:

- Filtration down to 2 microns nominal – 35 times finer than a human hair.
- High-rate filtration, at 15 gpm/sq.ft.
- Multimedia filter bed, from ultrafine sand right down to gravel, just like slow filters.
- Long-lasting stainless steel tanks.
- Water consumption for backwashing only 10% of conventional filters.
- Compact, modular configuration for optimum space utilization.
- Totally microcomputer-controlled operation.
- Reduction in operating and maintenance costs.
- Superior quality water for swimmers.

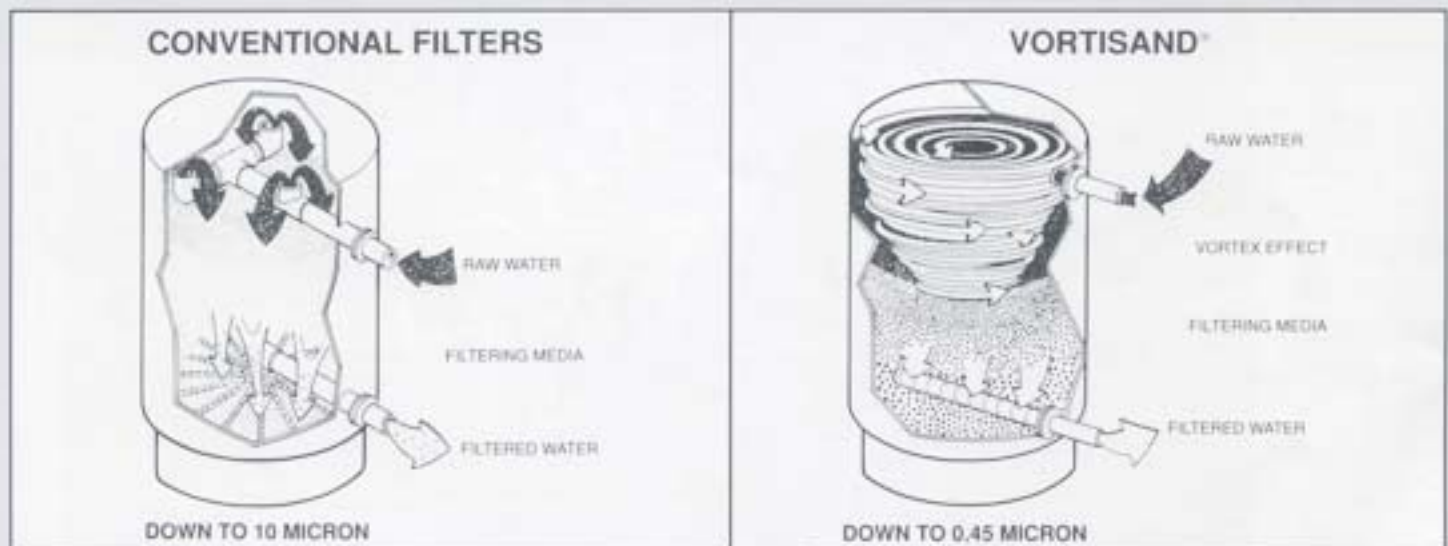
VORTISAND®

HIGH-RATE FILTERS BUILT LIKE SLOW FILTERS

VORTISAND filters have proven themselves for over 15 years. After many years of research and development, they provide filtration 10 to 20 times finer than sand filters now available on the market. Designed for 0.45, 2, 5 and 10 microns, their high level performance is due to their unique design which ingeniously combines centrifugal separation and sand filtration.

Using centrifugal force (vortex effect) to whirl the raw water above the filtration medium (sand) helps remove solid contaminants (in suspension) and significantly increases the effective filter surface within the tank. The turbulence causes a constant cleaning action which forces the suspended particles to accumulate on the inside walls of the tank, so that much finer sand can be used without clogging. The water, now largely free of impurities, is filtered through the medium, collected and used for various purposes. Contaminants remaining above the sand are expelled by means of backwashing, which requires less water and operating time than conventional sand filtration systems. The process therefore allows longer cycles and much finer filtration levels (0.45 microns vs. 10 microns and up).

VORTISAND uses sand multimedia, such as used in slow filters. The medium is layered, with ultrafine sand at the top and gravel at the bottom, providing solid construction and preventing channeling. VORTISAND has all the benefits of slow filters, as well as being compact and fast.



SEE ITS ADVANTAGES FOR YOURSELF

VORTISAND FILTERS BETTER AND FASTER

Because of its unique filtration principle and the fact that it is constructed in the same way as slow multimedia filters (3 to 5 gpm/sq.ft.), VORTISAND can remove suspended solids as small as 2 microns nominal (0.002 mm) at a speed of 15 gpm/sq.ft. This ultrafine filtration is unequalled by any conventional multimedia or horizontal filter.

This superior filtration means:

- Crystal clear water
- Comfort and safety for swimmers
- Improved chemical treatment control

VORTISAND IS ECONOMICAL

Saves Water

VORTISAND uses far less water for backwashing than do conventional filters. For example: a conventional 360 gpm capacity sand filter will use about 8,500 gallons of water for backwashing. VORTISAND uses 970 gallons for the same filtration capacity – a substantial saving in new water, and waste water treatment if required.

Saves Energy and Chemicals

Because of the low water flow required for backwashing, VORTISAND can use municipal instead of pool water. This means a saving in pool water which, in turn, means savings in energy and treatment chemicals.

Saves Space

VORTISAND is an ultrarapid filter (15 gpm/sq.ft.), with major advantages:

- It is very compact, so takes less space.
- It is very useful when replacing large, bulky filters.
- Its modular configuration allows ease of entry when setting up filters.

AUTOMATION – AT LAST!

Sonitec Inc. engineers have fitted VORTISAND with a microcomputer capable of managing all your filter operations. When the filters are dirty, a pressure detector triggers the washing and rinsing process, controls the opening and shutting of automatic valves, allowing filters to be backwashed one at a time while maintaining filtration. It will indicate filter condition at any time, warn if there is a problem with the pump or internal control mechanism. Everything is preprogrammed, so that human intervention and oversights are minimal. VORTISAND represents the leading technology in this area.

No more guessing when backwashing should be carried out; no more timing of backwash and rinse cycles, opening and shutting valves, or perhaps making a mistake and compromising the quality of the water. There are no more problems!

This is what VORTISAND can do for your pool.

VORTISAND® - 2 MICRON

SWIMMING POOL

MODEL	VESSELS		INSTALLATION SPACE REQUIRED LENGTH x HEIGHT x DEPTH		POOL VOLUME ¹ USG	FLOW REQUIRED FOR BACKWASH PER VESSEL		CONNECTIONS IN INCHES	WEIGHT APPROX. lbs
	NUMBER	DIMENSIONS INCHES	CAST IRON VALVES	NORYL PLASTIC VALVES		WASH GPM 5 MINUTES	RINSE GPM 1 MINUTE		
					6 HOURS				
ASW1-20	1	20 x 42	3'-0" x 3'-8" x 2'-6"	3'-4" x 3'-8" x 2'-6"	15100	25	30	1.5	750
ASW2-20	2	20 x 42	5'-1" x 4'-5" x 2'-6"	5'-4" x 4'-9" x 2'-8"	30200	25	30	2.5	1600
ASW3-20	3	20 x 42	7'-4" x 4'-5" x 2'-6"	8'-2" x 4'-9" x 2'-8"	45300	25	30	3.0	2400
ASW4-20	4	20 x 42	9'-3" x 4'-8" x 2'-8"	10'-5" x 5'-0" x 3'-0"	60400	25	30	3.0	3200
ASW5-20	5	20 x 42	11'-7" x 4'-8" x 2'-8"	12'-8" x 5'-0" x 3'-0"	75500	25	30	4.0	4800
ASW1-30	1	30 x 55	3'-2" x 4'-9" x 3'-6"	3'-2" x 4'-9" x 3'-6"	34200	45	75	2.0	2000
ASW2-30	2	30 x 55	6'-1" x 5'-9" x 3'-6"	6'-4" x 5'-9" x 3'-8"	68400	45	75	3.0	4000
ASW3-30	3	30 x 55	9'-2" x 5'-0" x 3'-8"	9'-5" x 6'-0" x 3'-10"	102600	45	75	4.0	6000
ASW4-30	4	30 x 55	12'-1" x 6'-0" x 3'-8"	12'-4" x 6'-0" x 3'-10"	136800	45	75	4.0	8000
ASW5-30	5	30 x 55	14'-10" x 6'-3" x 3'-10"	15'-1" x 6'-3" x 4'-0"	171000	45	75	6.0	10000
ASW6-30	6	30 x 55	17'-9" x 6'-3" x 3'-10"	18'-0" x 6'-3" x 4'-0"	205200	45	75	6.0	12000
ASW7-30	7	30 x 55	20'-8" x 6'-3" x 3'-10"	20'-11" x 6'-3" x 4'-0"	239400	45	75	6.0	14000
ASW8-30	8	30 x 55	23'-8" x 6'-3" x 3'-10"	24'-4" x 6'-3" x 4'-0"	273600	45	75	6.0	16000
ASW9-30	9	30 x 55	27'-0" x 6'-11" x 4'-0"	27'-0" x 6'-11" x 4'-2"	307800	45	75	8.0	18000
ASW10-30	10	30 x 55	29'-11" x 6'-11" x 4'-0"	29'-11" x 6'-11" x 4'-2"	342000	45	75	8.0	20000
ASW11-30	1x5 & 1x6	30 x 55	17'-9" x 6'-3" x 9'-4"	18'-0" x 6'-3" x 9'-6"	376200	45	75	8.0	22000
ASW12-30	2x6	30 x 55	17'-9" x 6'-3" x 9'-4"	18'-0" x 6'-3" x 9'-8"	410400	45	75	8.0	24000
ASW13-30	1x6 & 1x7	30 x 55	20'-8" x 6'-3" x 9'-4"	20'-11" x 6'-3" x 9'-8"	444600	45	75	8.0	26000
ASW14-30	2x7	30 x 55	20'-8" x 6'-3" x 9'-4"	20'-11" x 6'-3" x 9'-8"	478800	45	75	8.0	28000
ASW15-30	1x7 & 1x8	30 x 55	23'-8" x 6'-3" x 9'-4"	24'-4" x 6'-3" x 9'-8"	513000	45	75	8.0	30000
ASW16-30	2x8	30 x 55	23'-8" x 6'-3" x 9'-4"	24'-4" x 6'-3" x 9'-8"	547200	45	75	10.0	32000
ASW17-30	1x8 & 1x9	30 x 55	27'-0" x 6'-11" x 9'-10"	27'-0" x 6'-11" x 10'-0"	581400	45	75	10.0	34000
ASW18-30	2x9	30 x 55	27'-0" x 6'-11" x 9'-10"	27'-0" x 6'-11" x 10'-0"	615600	45	75	10.0	36000

¹ Pool filter selected based on a 6 hour turnover.

The filter system including all components are NSF certified.

The manufacturer reserves the right to make changes without notice.



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