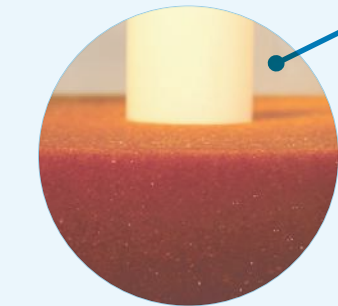


HOW **VORTECH**® WORKS

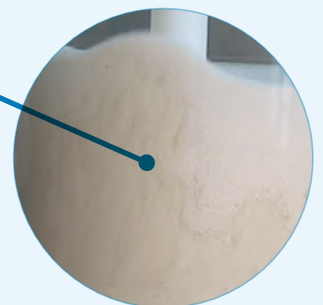
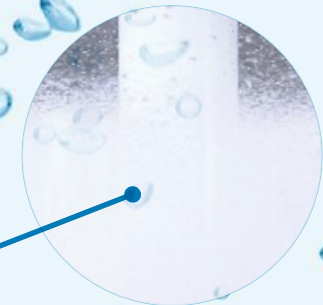
WATER FLOW
Evenly Distributed
Eliminates Channeling

MEDIA FRIENDLY
Works for ALL Medias
Eliminates Channeling
Upflow and/or Downflow Service
No Dead Spaces



HIGH EFFICIENCY
Increased Softening and
Filtration Capacity

WATER SAVINGS
Uniform Backwashing and
Media Lift at Lower Flow Rates



VORTECH® BY THE NUMBERS

TESTING
RESULTS OF A 16X65
VORTECH VESSEL CARBON
SYSTEM

BACKWASH

Vortech Carbon's "Sweet Spot" for backwash
5.76 gpm/ft²

Standard specification is 8 to 10 gpm

Volume savings and fluidization time with full
expansion of bed in less than 2 minutes

Vortech backwashes for 7 to 8 minutes (compared
to typical carbon filters of 14 minutes or more)

TESTING
VORTECH THIRD-PARTY
VALIDATION AND TESTING
RESULTS

**WQA/NSF 44 COMPARISON TESTING OF
A 1 CUBIC FOOT SOFTNER**

CAPACITY TEST @ 4.5 POUNDS OF SALT

Cone and gravel = 3472 grains
Vortech = 4333 grains
Increase of 25%

GALLONS TO DRAIN

Cone and gravel = 53.7
Vortech = 31
Decrease of 42%

PRESSURES/DELTA P

Cone and gravel = 13.4 gpm @ 15psig Delta P
Vortech = 13.4 gpm @ 9.8psig Delta P
Vortech @ 15psig Delta P, Flow rate is 17.8 gpm
Equals a 33% increase in flow rate

COMPARISONS
VORTECH VERSUS
STANDARD DISTRIBUTORS

The System	
Full Plate Distributor Tank	Standard Tank
One cubic foot of 10 percent resin	One cubic foot of 10 percent resin
The Results	
Full Plate Distributor Tank	Standard Tank
Bed expansion in backwash 10.5 inches of lift	Bed expansion in backwash 5 inches of lift
Time to lift bed to full expansion at 2.0 gpm = 2.0 min.	Time to lift bed to full expansion at 2.0 gpm = 4.25 min.
Four min. backwash time = 8.0 gal.	Eight min. backwash time = 16.0 gal.
Fast rinse reduced from six to two min. at 2.0 = 4.0 gal.	Fast rinse had to stay at six min. at 2.0 = 12.0 gal.

Notes on system comparison and results	
Full Plate Distributor Tank	Standard Tank
Water used during backwash and fast rinse = 12.0 gal.	Water used during backwash and fast rinse = 28.0 gal.
Water used to fill brine tank = 3.0 gal.	Water used to fill brine tank = 3.0 gal.
Water used in slow rinse = 27.0 gal.	Water used in slow rinse = 27.0 gal.
Total water used for complete cycle = 42.0 gal.	Total water used for complete cycle = 58.0 gal.
Flow rate at 10.7 psi drop = 12.7 gpm	Flow rate at 10.7 psi drop = 11.6 gpm

Example of usage for family of four on 20-grain hard water
60 gal. per person per day x four = 240.0 gal. of water per day
240.0 x 20.0 grains of hardness = 4,800 grains of hardness removed per day
4,800 grains removed - capacity of 28,200 grains capacity = 5.88 days between regenerations
5.88 - 30 days per month = 5.10 regenerations per month
5.10 per month x 10.0 lbs of salt (medium setting) = 51.0 lbs of salt used
5.10 regenerations x 42.0 gal. used = 214 gal. used per month down the drain
214.0 gal. per month = 7.13 gal. per day savings, equivalent to each person in the family flushing a low consumption toilet (1.6 gal.) one time less per day.

(Independent third party testing; Data provided by Abendroth Water Conditioning Inc.)

Performance claims are based on independent lab results and manufacturer's internal test data. Actual performance is dependent on influent water quality, flow rates, system design and applications. Your results may vary.

For more information, visit enpress.com

ENPRESS, LLC. | 34899 Curtis Blvd., Eastlake Ohio 44095
Phone 866.859.9274 | Fax 440.510.0202 | info@enpress.com



SAVES WATER. SAVES SALT.
SAVES THE ENVIRONMENT.



WHAT IS VORTECH®

Vortech® is the world's most innovative and efficient universal distribution system for water treatment systems, in filtration and softening applications. The design creates fluidity of the media bed and extends contaminant removal capacity; which means less regenerations and significant reduction of water use.

Our patented self-cleaning nozzle design accelerates the velocity of water across the co-polymer polypropylene distributor, preventing the potential build-up of iron and other potential contaminants, in a wide range of water treatment applications. It is just another example of the type of innovation you've come to expect from ENPRESS®.

IMPROVES EFFICIENCY

2.5x or more open surface area of traditional distributors

AVAILABILITY

The Vortech®, available in all vessel diameters and configurations for 7", 8", 9", 10", 12", 13", 14" and 16"; maximizes today's high efficiency control valves.

**COUNTER
CLOCKWISE**
Uniform lift and
swirling of media bed

EXPANDING ARRAY

Nozzles double as plate expands from the center, eliminating channeling

More open area of the distributor to the outside versus the inside forces the water in downflow service to utilize the entire media bed, increasing efficiency and filtration capacity.

Slot Width = 0.010"

SELF CLEANING

Patented "airplane wing" nozzle design eliminates potential clogging and build-up

FEATURES & BENEFITS

Universal distributor for use in filtration and softening applications

Spin-welded plate to inner bottom dome, designed to handle over 6500 lbs. of force and differential pressure

Permanent attachment of dip tube to distributor, so when servicing a valve, distributor stays in place

Increase in softening and filtration capacity, due to improved flow through media

More than 30% reduction in required backwash times and flow rates compared to standard systems, due to improved bed lift at lower flow rates

Elimination of gravel, saving on overall cost and unit weight, for shipping

Most efficient softening regeneration, reducing annual consumption of salt

Up to 40% less pressure drop thru the system, improving system flow characteristics and design