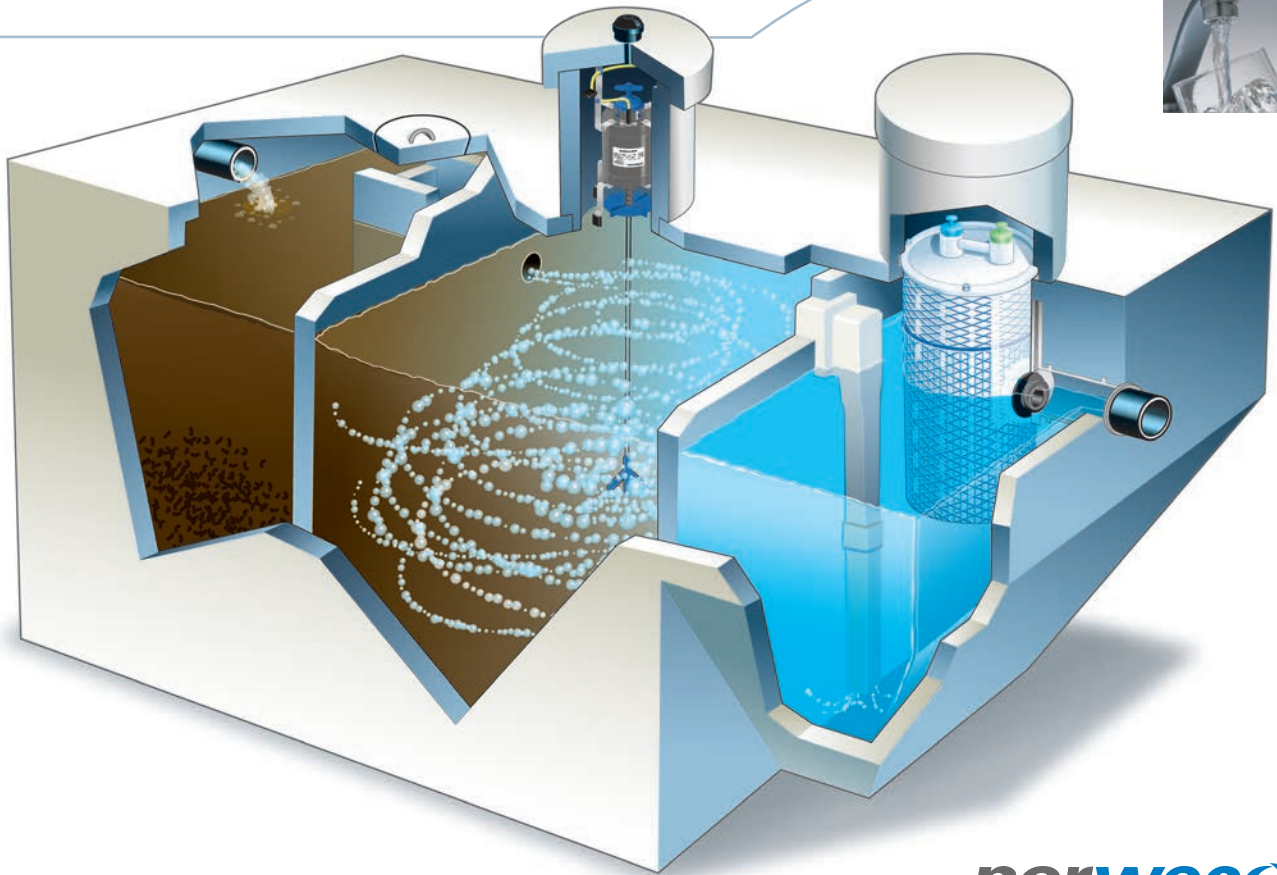
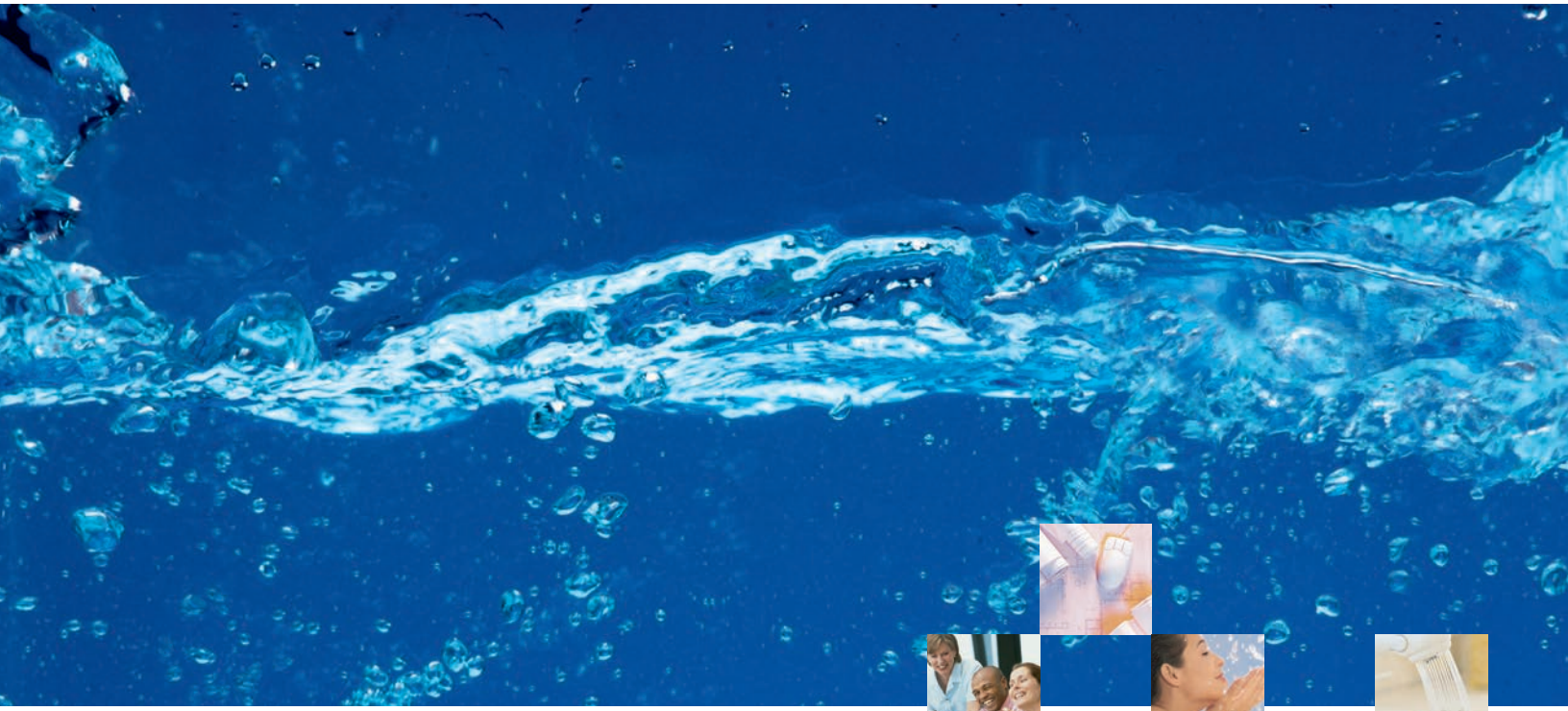


# SINGULAIR®



***norweco***®

*Engineering the future of water  
and wastewater treatment*



# SINGULAIR®

A dynamic combination of electro-mechanical equipment, solid state technology and web-based monitoring

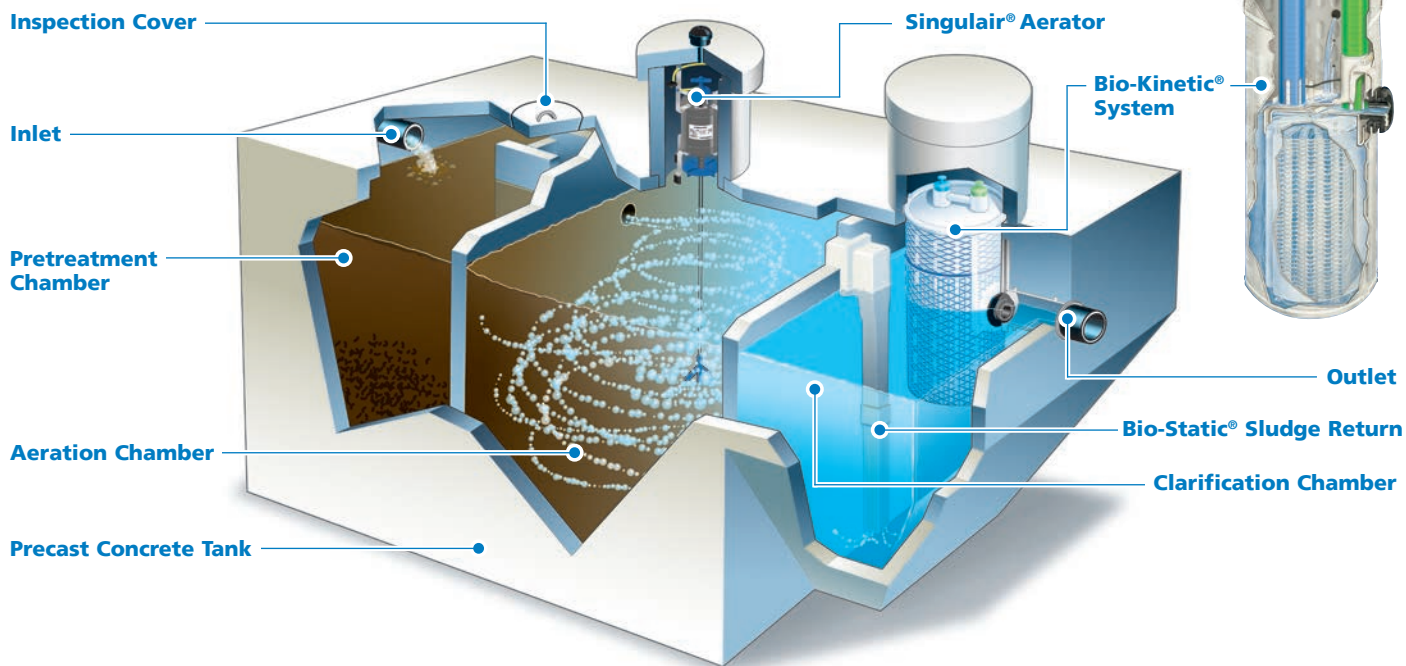
that translates to increased property value, performance certified for you

The new state-of-the-art Singulair treatment system is the trouble-free, energy-efficient alternative to that out-dated, unmanageable septic tank. It sets a new standard for properties that are not connected to centralized sewers. It quietly, efficiently and automatically treats all incoming wastewater, returning harmless effluent to the environment in just 24-hours. Because it operates only 30-minutes every hour, the new Singulair uses half the energy required by continuous-run systems.

We've been providing progress through service since 1906. When you consider the facts presented in this brochure, you will see why Norweco is recognized everywhere as providing today's answer for the protection of tomorrow's environment.

solutions in wastewater treatment

# Singular<sup>®</sup> rivals the performance of the world's most advanced treatment equipment



## Inlet

Untreated wastewater enters the system here.

## Pretreatment Chamber

Wastewater enters at the Singular inlet and is equalized here as anaerobic bacteria and gravity precondition it.

## Aeration Chamber

Here, safe, living aerobic bacteria convert the wastewater into stable substances. Flow equalization maximizes this biological oxidation and assures 24-hour retention and treatment.

## Aerator provides complete treatment

Our exclusive aerator infuses the fresh air that safe, living microorganisms require to fully digest and treat wastewater inside the Aeration Chamber. Powered by our 1725 RPM, 115 volt, fractional horsepower motor, our quiet, reliable aerator is inexpensive to operate, reduces heat build up and dramatically increases bearing life. Each aerator is precision engineered, tested and certified to operate only 30-minutes per hour. Only the stainless steel aspirator shaft and reinforced nylon aspirator come in contact with liquid in the Aeration Chamber.

## Clarification Chamber

Flow equalization enhances the settling of biologically active substances inside the Clarification Chamber. Wastewater has now been converted into clarified liquids in this chamber.

## Flow Equalization Ports

They control the flow through all upstream and downstream processes and they regulate the amount of treated effluent that can enter the Bio-Kinetic System.

## Bio-Kinetic<sup>®</sup> System

Constructed entirely of plastic and rubber components that are impervious to this environment, our Bio-Kinetic System combines filtration, settling, non-mechanical flow equalization, optional disinfection, adjustable outlet weir and optional dechlorination features into a single, revolutionary package.

## Precast Concrete Tank

Every Singular System is constructed of high quality, non-corrosive materials under our rigid quality control standards. The tank, access risers and cover are reinforced precast concrete manufactured locally by your factory-trained, licensed Norweco distributor.

## Inspection Cover

Access is safe and easy.

## Outlet

Only a clear, safe and odorless liquid exits the system here for return to your environment.



## SERVICE PRO<sup>®</sup> Control Center

EVERY SINGULAR AERATOR IS INSTALLED WITH A SOLID STATE ELECTRICAL CONTROL CENTER. EACH IS EQUIPPED WITH RESETTABLE CURRENT SENSOR, ON/OFF SELECTOR SWITCH, RED WARNING LIGHT, TIME CLOCK, AUDIBLE ALARM, AUXILIARY INPUTS AND FCC LICENSED AUTODIALER FOR REMOTE MONITORING OF INDIVIDUAL COMPONENTS.

Progress Through Service Since 1906. Ultimately, our success over all these years boils down to perceived, appreciated and consistently delivered quality service to our customers.

## customer focus



### Consider the facts:

- The Singulair Bio-Kinetic System meets or exceeds government standards. The Singulair System is performance certified and listed by NSF International. The Singulair is certified to NSF Standard 40 and our Bio-Kinetic System is certified to NSF Standard 46. Underwriters Laboratories and the Canadian Standards Association have recognized, certified and/or listed all electromechanical components. The auto dialer telemetry system is licensed by the Federal Communications Commission.
- The Bio-Kinetic System includes 3 positive filtration zones with 8 independent settling zones.
- 48-hour retention in the Singulair System reduces pumping frequency as compared to smaller capacity systems.
- Operating costs are low. The only electrical component is our low RPM aerator.
- Excessive hydraulic flows can cause major problems for septic tanks, sand filters and any treatment method that does not provide flow equalization. The exclusive non-mechanical flow equalization feature of our Bio-Kinetic System guarantees that all incoming wastewater is fully treated, regardless of heavy use periods.
- You can install an efficient Singulair plant for about the same cost as an old-fashioned septic tank.
- Eliminates odors and all unsightly, unsanitary conditions so common with septic tanks.
- Durable, reliable components are safely installed out-of-sight below grade. No exposed power cords, compressors, filters or air lines accessible to children or pets.
- No need to purchase a separate tank – our precast concrete pretreatment chamber is part of the Singulair System.
- The Singulair System automatically equalizes influent and effluent flow through all treatment and disposal stages. Flow variations from guests, parties or vacations do not affect treatment performance.
- All flow is equalized an average of 50% at the NSF Standard 40 600 GPD (gallons per day) design loading pattern.
- Your local, factory-trained, certified and licensed Norweco distributor sells, installs and services your Bio-Kinetic System with pride. You'll find your distributor's name and contact info conveniently posted on the system's control center.



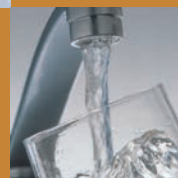
#### Optional Blue Crystal® Residential Disinfecting Tablets

OUR PURE CALCIUM HYPOCHLORITE TABLETS ARE SPECIALLY FORMULATED FOR USE IN THE SINGULAIR SYSTEM FOR EFFICIENT, RELIABLE DISINFECTION. EACH BLUE CRYSTAL TABLET CONTAINS AT LEAST 70% AVAILABLE CHLORINE. PACKAGED IN RE-SEALABLE CONTAINERS, OUR TABLETS ARE AVAILABLE FROM YOUR LOCAL NORWECO DISTRIBUTOR IN 10 AND 100 POUND POLYETHYLENE PAILS.



#### Optional Bio-Neutralizer® Dechlorination Tablets

RELIABLY, SAFELY AND ECONOMICALLY REDUCE RESIDUAL CHLORINE AND PROTECT ENVIRONMENTALLY SENSITIVE SURFACE WATER WITH OUR SPECIALLY FORMULATED TABLETS. PACKAGED IN EASY TO HANDLE, RE-SEALABLE CONTAINERS, OUR BIO-NEUTRALIZER DECHLORINATION TABLETS ARE AVAILABLE IN 25 AND 45 POUND POLYETHYLENE PAILS FROM YOUR LOCAL NORWECO DISTRIBUTOR.



Norweco distributors are located throughout the United States and much of the rest of the world. Research, product development, manufacturing, marketing and sales support are conducted inside our offices and factory in Norwalk, Ohio. Everyone at Norweco is committed to shaping the future of our industry.

# engineering

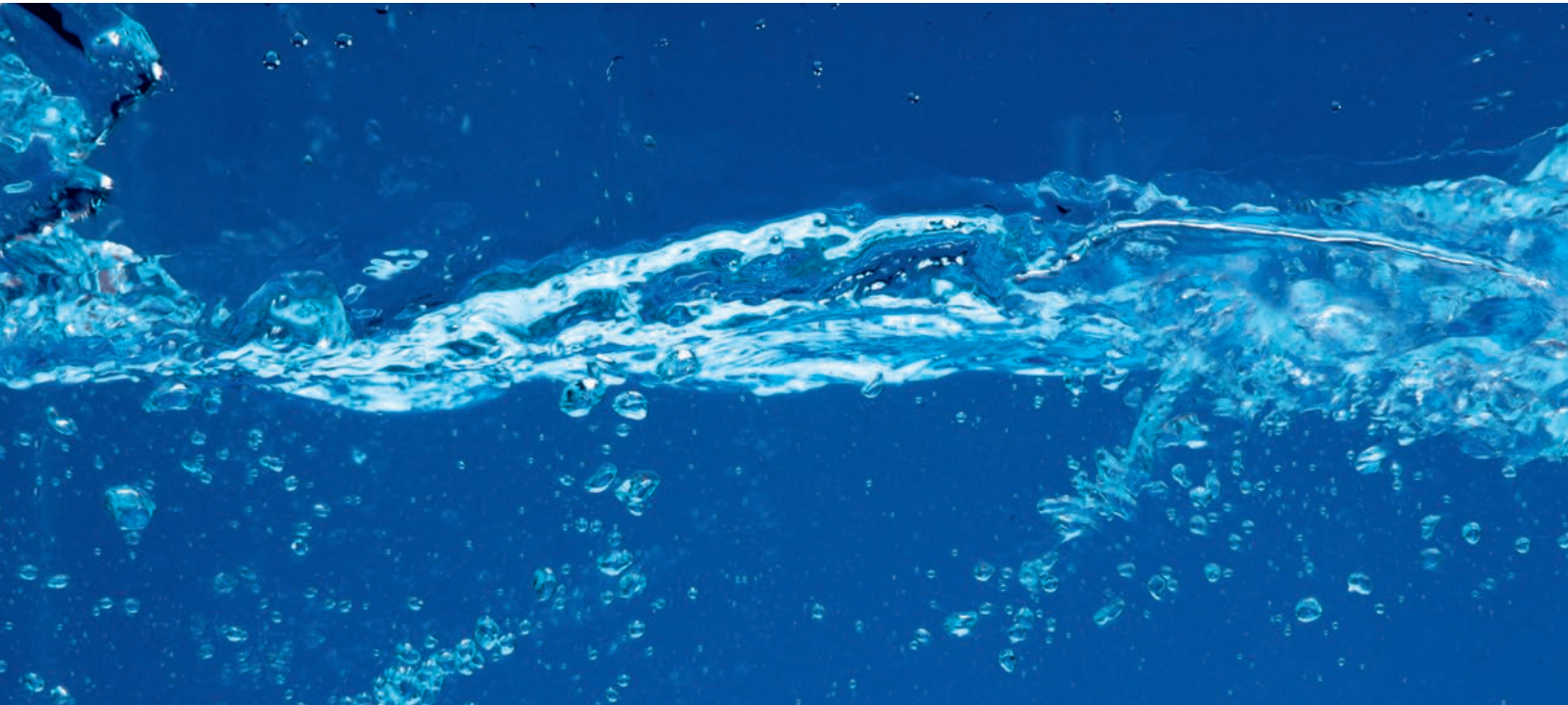
# the future

of water and wastewater treatment

## Specify Singulair®

Your local Norweco distributor is fully trained to install your Singulair System and any other Norweco product you choose to protect your environment. Each of our distributors has completed a nationally accredited Singulair factory-training program.

The Singulair System comes to you complete, including delivery, tank setting, equipment installation, plant start-up and service. A series of service and adjustment inspections are scheduled for the first two years of operation at the time your system is installed. These inspections are included in the sale so that your system continues to perform at the highest level to protect you and your investment. Extended service contracts are also available from your Norweco distributor.



## comprehensive protection, guaranteed



Singulair is warranted against defects in material and workmanship under normal use and service by a comprehensive Lifetime Warranty and Exchange Program. This 3 year Limited Warranty and Lifetime Exchange provides single source protection and covers all system components. Complete Warranty and Exchange information, a Warranty Registration Card and Owner's Manual are included with purchase.

***norweco***<sup>®</sup>

*Engineering the future of water  
and wastewater treatment*

**220 Republic Street  
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PH: 419.668.4471  
FAX: 419.663.5440  
www.norweco.com**

The Singulair Bio-Kinetic System components have been listed, licensed and/or certified by each of the following agencies/organizations.



*Progress Through Service Since 1906*

*We engineer, manufacture, install and maintain advanced water and wastewater treatment technologies for residential properties, communities and commercial properties that are not connected to sewer lines. Norweco treatment systems are in service all over the world.*

*Norweco<sup>®</sup>, Norweco.com<sup>®</sup>, Singulair<sup>®</sup>, Modulair<sup>®</sup>, Travalair<sup>®</sup>, Singulair Green<sup>®</sup>, Ribbit Rivet<sup>®</sup>, Hydro-Kinetic<sup>®</sup>, Hydro-Kinetic Bio-Film Reactor<sup>®</sup>, Evenair<sup>®</sup>, Lift-Rail<sup>®</sup>, Microsonic<sup>®</sup>, Bio-Dynamic<sup>®</sup>, Bio-Sanitizer<sup>®</sup>, Bio-Neutralizer<sup>®</sup>, Bio-Kinetic<sup>®</sup>, Bio-Static<sup>®</sup>, Bio-Gem<sup>®</sup>, Bio-Max<sup>®</sup>, Bio-Perc<sup>®</sup>, Blue Crysta<sup>®</sup>, Phos-4-Fade<sup>®</sup>, Enviro-C<sup>®</sup>, ClearCheck<sup>®</sup>, ChemCheck<sup>®</sup>, Tri-Max<sup>®</sup>, Hydra-Max<sup>®</sup>, Service Pro<sup>®</sup>, MCD<sup>®</sup>, TNT<sup>®</sup>, WASP<sup>®</sup>, Grease Buster<sup>®</sup> and "BUSTER" logo are all registered trademarks of Norwalk Wastewater Equipment Company, Inc.*