



**SERVING FLORIDA'S
WATER & WASTEWATER INDUSTRY
SINCE 1987**

• Integrity is a choice. It is consistently choosing the purity of truth over popularity.

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Denitrification Filters

Nexom's™ **Blue Nite®** biological denitrification filters are a simple, powerful technology for consistently lowering nitrates to <1 mg/L NO_x-N.

Lower nitrate and total nitrogen discharge limits across the country are pressing utilities to reduce their nutrient discharges.

The **Blue Nite®** system provides a modular, end-of-pipe solution that will bring your treatment plant into compliance, successfully meeting tightened discharge requirements.

The **Blue Nite®** system utilizes Nexom's™ continuous backwash upflow sand filters; where a carbon source is dosed into the wastewater prior to flows entering the sand filters.



Inside the filters, fixed-film heterotrophic bacteria convert nitrates (NO₃⁻ and NO₂⁻) to atmospheric nitrogen (N₂).

The **Blue Nite®** system is available in a number of models and configurations. The modular nature of the filter design allows ease of

engineering with potential future expansions in mind. The filters are available in freestanding fiberglass or stainless steel tanks, or they can be configured in multi-module concrete cells.

NEXOM™ provides proven solutions for denitrification.

AMWELL® Clarifiers, Skimmers, and Telescoping Valves



AMWELL® (established in 1868) manufactures a full line of circular clarifiers. If you

are looking for a suction type clarifier or a pier-supported solids contact clarifier, we have your solution.

AMWELL® manufactures single or double-sweep scrapers and standard or spiral flights.

A complete line of rectangular chain and flight clarifiers are also available along with manual or gear operated

slotted pipe surface skimmers.

Do you need decanting capability within your sludge digesters to assist in sludge thickening? **AMWELL®** manufactures rack & pinion or non-rising stem telescoping valves.

With **AMWELL®** you can count on generations of experience and American-Made products.

SyncroFlo Pumping System Solutions



SyncroFlo provided the potable water booster pumping system at the *Royal Harbor* gated community in Lake County, FL.

Water is supplied to the development by the Water Division from the City of Tavares Utilities Department. Residents within the *Royal Harbor* community had been experiencing low water pressure within their development during peak flows. After identifying the problem, the City and their Consultant took proactive steps to find a solution for the residents.

The City's Consultant determined that a booster pumping station was needed and then worked with **SyncroFlo** during the design concentrating on system performance, pump selection, pump efficiencies, control logic, and architectural design. Ultimately, the in-line booster pumping system design was completed, bid, and constructed. It now successfully serves the needs of the *Royal Harbor* community and the *City of Tavares*.

SyncroFlo has been providing pre-engineered, skid-mounted

pumping systems since 1962 with over 20,000 systems shipped and installed worldwide.

SyncroFlo manufactures potable water booster pump stations, plant water pumping systems, as well as effluent reuse pump stations for the municipal marketplace.

Pump selection, controls, and other system components are specifically tailored to customer preferences.

UL certification is available for controls as well as the entire pumping system.

FWEA AIR QUALITY COMMITTEE UPDATE



The **FWEA AIR QUALITY COMMITTEE** held their annual seminar in Ft. Myers in February. Lee County Utilities hosted this year's event at the **Lee County Emergency Operations Center**.

The workshop was well attended by utility personnel and engineers from throughout the State of Florida.

Technical presentations were

provided by a nationally acclaimed group of consultants in the odor control field.

This seminar was an opportunity for attendees to gain an in-depth understanding of odor control system design issues along with sound engineered solutions.

The event was a continued education opportunity providing CEUs and PDH credits

for those in attendance.

Please watch the **AIR QUALITY COMMITTEE** link on the FWEA website for upcoming news on the next workshop.

Also, the **FWEA Air Quality Committee** is pleased to announce that **JEA** is the recipient of the 2017 **FWEA ENVIRONMENTAL STEWARDSHIP AWARD FOR ODOR CONTROL**.

DUPERON® FlexRake® — Mechanical Barscreens



Manatee Co. SEWRF

The **DUPERON® FlexRake®** is a proven mechanical barscreen with installations in major wastewater facilities throughout the United States.

It is available with typical bar spacing ranging from 1/4"—4". The unique, heavy duty **FlexLink®** construction eliminates the need for lower sprockets and bearings and is capable of lifting up to 1,000 lbs. Multiple barscreen rakes can be provided every

21" for high-volume debris applications. Rakes provide full penetration efficiently cleaning three sides of the barscreen; i.e., the surface and the entire depth of the spacing between both sides of the bars.

The **FlexRake®** is available in 304, 316 and 316 L construction with enclosures for odor control. Enclosures are provided with full service hatches for inspection and O&M access.

The **FlexRake®** is standard with two speed VFD operation which can be run manually or automatically using feedback from level sensors.

DUPERON® provides a full complement of equipment from the **FlexRake®** to conveyors for screenings and washer compactors. When choosing **DUPERON®**, you benefit from over 20 years of industry experience along with a 5-Year Warranty.



Cloth Disk Filter

The **NEXOM infini-D** disk filter is a modular system contained within a stainless steel rack as shown in the photo to the right. These filters can be provided as a complete system inside fabricated vessels, or they can be set in poured-in-place concrete tanks.

Water flows from the outside to the inside of the filter. Disks are mounted in a fixed position and do not rotate, eliminating the need for rotating seals at the center of each filter element.

During the filtration process,

solids accumulate on the exterior of the cloth media progressively restricting flow and causing the water level in the overall filter tank to rise. Water level indicators are used to automatically activate the filter cleaning cycle.

The **infini-D** uses a vacuum system to clean the exterior of the cloth filters. During the cleaning function, the vacuum head rotates around each side of the individual disk filters. The vacuum heads rotate in alternating directions which effectively cleans the cloth piles of the disk.

The backwash cycle does not interrupt filtration as only 5% of the panel surface is cleaned at one time.

The discharge from each filter element can be checked at the filter's outlet pipe allowing for the monitoring of the performance of individual filters.

When required, single disk cartridges can be disconnected, removed, inspected, and replaced without stopping the active filtration process in the other cells. This provides ease of maintenance and online redundancy in design.



EVOQUA WATER TECHNOLOGIES—Odor Control Systems

Evoqua Water Technologies maintains its longstanding product offering—from small odor control systems with air flows as low as 35 to 50 CFM—to large air flows as high as 20,000 to 30,000 CFM.

Biofilters and biotrickling filters continue to be very popular due to their ability to biologically reduce odorous compounds effectively and economically.

The ZABOCs biofilter is a two stage biofilter providing

biological reduction of H_2S and VOCs in stage one with an internal second stage comprised of a carbon bed to polish off residual reduced organic sulfides.

Stand alone carbon adsorption can still be an effective way to adsorb odorous VOCs when they are present at low levels.

Chemical scrubbing continues to be the most flexible and reliable treatment of odors released into the atmos-

phere when complete odor control is required.

The vapor phase odor control team at **Evoqua Water Technologies** continues to offer the full range of treatment options and technologies. One technology does not fit all applications.

Please give us a call and let us assist you with comparing technologies so you can find the right solution for your particular application.



HALLSTEN CORPORATION —Aluminum Tank Covers

HALLSTEN CORPORATION manufactures flat aluminum cover systems for wastewater treatment plant process tankage.

These covers are designed as a walking surface for human access by plant personnel.

HALLSTEN tank covers are substantially air tight and are typically installed in conjunction with a centralized odor control system.

HALLSTEN CORPORATION provides and installs these covers using certified plant personnel to assure proper installation and compliance with local hurricane windload standards in Florida.

Survey crews from the factory obtain the actual field dimensions for the cover system. These field dimensions are used when the cover is released to fabrication. **HALLSTEN CORPORATION**

provides a factory crew to install the covers and is ultimately responsible for the integrity of the cover dimensions as well as the fit of the covers on the tankage.

HALLSTEN CORPORATION offers extensive and established experience in the State of Florida with installations and references throughout the state.





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We value your consideration of
EQUIPMENT PLUS SOLUTIONS, INC.
and welcome the opportunity to be of service to you.

Please take a moment and visit our web site.
You'll find direct links to the companies we represent
as well as information and links to our offices.

We stand ready to assist you—we're just a phone call
or an email away.

DUPERON® STORMWATER TRASHRAKES

The **DUPERON® FlexRake®** is engineered to be strong to handle the rigors of Florida's stormwater debris removal applications.

This is a proven and reliable screening system with over 500 installations. Over 95 of these installations are within the South Florida Water Management District.

With the **FlexRake®** technology, there are no lower sprockets, tracks, or bearings under the water to lubricate or repair eliminating the need for underwater repair or maintenance.

The entire width of the screen is cleaned approximately every two minutes, minimizing potential for headloss.

The front-cleaning front return design of the **DUPERON® FlexRake®** eliminates carryover making it ideal for storm-

water and flood control applications.

The **DUPERON® FlexRake®** is available from 2 feet to 12 feet wide and up to 100 feet long with a 1,000 lb. lifting capacity.

The **FR** and **FRHD FlexRake®** models are specially engineered for open channel applications where debris size and velocity may be unpredictable. They have proven their versatility over the years by handling everything from general refuse, aquatic vegetation, tree limbs, lumber, tires, oil drums, and even automobile frames.

The low operating speed, as well as the ability of the rake to flex and pivot around objects, ensures minimal impact on the ecosystems into which it is placed. The **FlexRake®** is certified as Manatee-Safe in sensitive Florida installations.

