

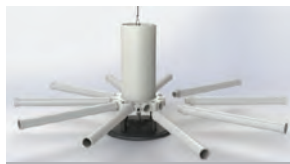
Treatment, Filtration and Stormwater

By Craig Mandli

Aeration Equipment

TRIPLEPOINT ENVIRONMENTAL ARES LAGOON AERATOR

The Ares Lagoon Aerator from Triplepoint Environmental combines aeration efficiency with turbulent mixing in a single, portable unit. It has a rugged, precision-machined solid hub with no seams to crack or leak. The coarse bubble static tube draws up to 7,800 gpm of water and liquefied organic matter from the floor to keep solids in suspension and prevent sludge accumulation. Diffuser Quick Connect ensures rapid, reliable installation of high-efficiency, self-cleaning fine-bubble diffusers. Independent testing demonstrates standard oxygen transfer of up to 2.4%/ft or 4 to 7 lb/O₂ per horsepower hour, translating to up to 60% energy savings. Its high negative buoyancy ballast is 30% lighter out of the water for easier installation and maintenance. Attached to an onshore blower via laterals or individual air lines, it has no moving parts in the water and simply drops in from the surface for lagoon upgrades without downtime. **800-654-9307; www.tpenv.com**



Ares Lagoon Aerator from Triplepoint Environmental

Blowers

EURUS BLOWER ZG BLOWER PACKAGE

The ZG blower package from Eurus Blower includes an internal sound-dampening feature lowering both sound and pulsations in blower packages with or without a sound enclosure. The package includes an integrated silencer, base frame, inlet filter/silencer with automatic belt tensioning and vibration isolators. Other components include a motor, drive, valves, flex connections and controls that are provided site specific and interchangeable. The complete blower skid package does not need to be sent to a blower repair facility in the event one item fails or needs rework. All critical components may be quickly replaced, substituted or repaired directly by the original supplier. **630-221-8282; www.eurusblower.com**



ZG blower package from Eurus Blower

HOWDEN 827 DVJ

The 827 DVJ dry-vacuum blower from Howden is a heavy-duty unit with integral ductile iron impellers. The casing headplates, gear cover and drive-end are gray iron. Carburized and ground spur timing gears are taper-mounted on the shaft and secured with a locknut, cylindrical roller bearings, splash



827 DVJ dry-vacuum blower from Howden

lubrication on both ends, and easy-to-read sight glasses for maintenance. The blower is capable of handling high inlet temperatures for rough applications. An efficient discharge jet plenum design allows cool atmospheric air to flow into the cylinder, so the blower continues to run under blank-off conditions. It comes in a compact, lightweight package and delivers more than 5,700 cfm in an 8-inch gear diameter frame, as well as 28 inches Hg. **800-557-6687; www.howdenroots.com**



Blowers from NamWon Turbo One

NAMWON TURBO ONE BLOWERS

Blowers from NamWon Turbo One are equipped with high-speed permanent magnet synchronous motors, boosting their maximum efficiency of around 98%. They include the latest innovations in air bearing, precision, machining impeller, high-speed high-efficiency permanent magnet motor, high-speed control inverter, automatic control logic and system design. They use an airfoil bearing that employs air as a lubricant, meaning they do not need separate lubricant and have a long service life. Maintenance costs are low because only the suction filter is replaced. There is no vibration and no need for separate sound proofing with a noise of 70 to 80 dB. **821-544-2280; www.nwturbo.com**

ROBUSCHI ROBOSX SCREW BLOWER PACKAGE

The Robuschi Robosx Screw blower package offers pressures up to 36 psi and flows up to 5,625 cfm. The efficient rotary screw blower offers energy savings of up to 30% when compared to previous blower technologies. The package offers the widest efficient turndown capability in flow to save energy. All enclosed packages come standard with the AirSmart G2 controller. This offers 24-hour monitoring and provides flexible data output via Ethernet or RS-232 port. **866-428-4890; www.gardnerdenver.com**



Robuschi Robosx Screw blower package

Filtration Systems

AEDGE WATER TECHNOLOGIES BIOTTA



biotta biological filtration system from AdEdge Water Technologies

The biotta biological filtration system from AdEdge Water Technologies leverages nature to offer a sustainable solution for wellhead treatment of inorganic and organic contaminants. Its fixed-bed, dual-stage biotreatment cultivates an environment for micro-biological organisms to destroy con-

taminants or reduce elements to simple unarmful forms. The fixed-bed treatment process consistently addresses contaminants at low levels, intermittent or fixed operation, and the dual bed assimilates a complete packaged biotreatment plant. It has regulatory approval for the reduction of nitrate and perchlorate, and it demonstrates hexavalent chromium, VOCs, iron, manganese and sulfide elimination in a single process. The low-volume discharge is easily managed as a nonhazardous waste stream. **866-823-3343; www.adedgetech.com**

ANUE WATER TECHNOLOGIES PHANTOM

The Phantom system from Anue Water Technologies provides point source odor elimination by infusing oxygen and ozone into recycled wastewater to react with and remove hydrogen sulfide and mercaptans



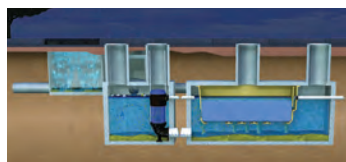
Phantom system from Anue Water Technologies

from collections system lift stations. It eliminates chemical feed systems, as well as ongoing corrosion and maintenance issues associated with vapor phase hydrogen sulfide. It has a small footprint and quiet operation (less than 60 dB) while providing an ideal solution for high traffic areas in neighborhood locations.

Programming features allow the operator to vary the frequency and duration of the planned operational cycle each day. Rate with each duty cycle to address the varying odor levels that naturally occur at high and low flow periods in the collections system each day. These programming options match the odor control treatment to the problem, which reduces operational and maintenance expenses while achieving maximum performance. **760-727-2683; www.anuewater.com**

BIOMICROBICS BIOSTORM STORMWATER TREATMENT SYSTEM

Easy-to-install, preengineered BioSTORM stormwater treatment systems from BioMicrobics can handle flows from 0.5 to 10 cubic feet per second and effectively filter and capture more than 90% of common pollutants such as trash, oils, sediment and other suspended solids that would otherwise end up in sewer overflows, waterways or the receiving environment. Used for primary and secondary applications, the offline, two-phase design consists of a StormTEE deflector screen to physically separate trash and large debris, and a fixed-film media that acts to separate liquids from solids and oil from water. Both treatment components can be used together to form a complete system or used separately for different sustainable site applications. The system allows for design flexibility and mounts easily in precast tanks with minimal maintenance. **800-753-3278; www.biomicrobics.com**



BioSTORM stormwater treatment systems from BioMicrobics

ENVIRO-CARE SAVI GVS MULTIRAKE PERFORATED PLATE SCREEN



SAVI GVS Multirake Perforated Plate Screen from Enviro-Care

The SAVI GVS Multirake Perforated Plate Screen from Enviro-Care is a unique multirake design where the bars have been replaced by a stainless steel perforated plate to achieve higher debris capture. Multiple wipers remove the debris from the perforated plate and transport the screened material to discharge. Independent testing has proven that perforated plate screens have higher capture rates, which can be as high as 85%

depending on design. It can be mounted in traditional channels at 75 degrees, or at 90 degrees for deep, narrow channels and wet wells. The low-maintenance design makes it a suitable choice for remote locations. **815-636-8306; www.enviro-care.com**

SCREENCO SYSTEMS MEGA SCREEN 800

The Mega Screen 800 septic receiving station from Screenco Systems includes 51 square feet of screening area, fed by a 6- or 8-inch inlet with dual-fan spreaders that deflect waste down onto the screen, making the front screen almost self-cleaning. Complete vac tank clean-out is available with the



Mega Screen 800 septic receiving station from Screenco Systems

optional side and front splash sheeting. It processes up to 1,000 gpm of wet well or septic waste with an 8-inch cam outlet fitting. The Dual Screen Design is nonmechanical and uses gravity to separate trash from the waste stream. The standard unit features all-aluminum construction with stainless steel, 3/8-inch-gapped bar screens on opposing angles and meets the Ecology 503 Regulations for septic screening. A bolt-on chute assembly allows trash to exit in either direction, and built-in forklift skids make the unit portable, allowing for setup virtually anywhere. **208-790-8770; www.screencosystems.com**

Lagoon Products

AMERICAN PLEASURE PRODUCTS UTILITY SERVICE BARGE



Utility Service Barge from American Pleasure Products

The Utility Service Barge from American Pleasure Products can provide a safe working environment and improve confidence when working on the water. The 8-by-12-foot work platform has suitable stability and flotation from using two 23-inch-diameter 12-foot pontoons. This barge can be used for servicing wastewater treatment ponds and lagoons. It includes aluminum frame construction with stainless steel hardware. The deck is covered with a nonslip nickel-plate vinyl for stability and easy cleaning. A heavy-duty protective handrail is included. To maneuver the barge, a heavy-duty outboard motor mount is included for small gasoline or electric motors. It is available with a 1,000-pound-capacity lifting crane, one life ring and weld-on lifting eyes on each corner. **989-685-2697; www.aquacycleusa.com**



Heat retention covers from Industrial & Environmental Concepts

INDUSTRIAL & ENVIRONMENTAL CONCEPTS HEAT RETENTION COVERS

Heat retention covers from Industrial & Environmental Concepts can be essential for wastewater treatment plants where wintertime temperatures affect nitrification. Covers are available from R-4 to R-17 and

have proven effective, reliable and low maintenance. Insulated covers can be used in both aerobic and anaerobic processes. An additional benefit of the covers is algae control and management of offensive odors. **952-829-0731; www.ieccovers.com**

MARKLAND SPECIALTY ENGINEERING AUTOMATIC SLUDGE BLANKET LEVEL DETECTOR



Automatic Sludge Blanket Level Detector from Markland Specialty Engineering

The Automatic Sludge Blanket Level Detector from Markland Specialty Engineering controls solid-liquid interface levels and automates biosolids removal. Used in primary, secondary and backwash clarifiers and settlement tanks (including lamellas, dissolved air flotation units and decanting tanks), its use of LEDs enables it to locate both the settled silt or biosolids bed and overlying cloud layer, automatically adjusting beam intensity to accommodate different concentrations. Its slim profile is ideal for obstructed/constricted areas. It allows users to program pumps to operate only when necessary, helping