

Crane Pumps & Systems

& Systems provides versatility, high performance, and unequaled value. For more than a century municipalities, engineers, plumbing contractors, builders, and developers have relied on Barnes wastewater pumps and pressure sewer systems for reliability and durability. From fractional horsepower sump pumps to robust grinder and chopper pumps,

Barnes delivers innovative, cost-effective

he Barnes family of pump products from Crane Pumps

BARNES SH NON-CLOG AND SITHE CHOPPER PRODUCTS

Solids Handling Pump solutions.

One of the main issues plaquing customers has been and will continue to be the changing waste stream's capability to handle solids. This led to the development of the Barnes SH Non-Cloq and SITHE Chopper products. The SITHE chopper features a patented open center cutter design, field replaceable heat-treated stainlesssteel blades, and plug-n-play cord, making it the preferred pump of choice in municipal wastewater applications, especially those with clogging issues. Furthermore, Barnes understood the rising demand for a more efficient submersible pump that could attain premium efficient, IE3, motor ratings. Utilizing their proven nonclog and chopper technologies, they introduced the envie3 motor line. These pumps took Barnes' proven non-clog and chopper wet ends and outfitted them with a premium efficient motor that can run in both wet applications and dry pits, as well as in horizontal or vertical configurations. The development of this platform expanded the portfolio and pushed the envelope on one solution

RAZOR GRINDER PUMPS

solving a variety of needs.

Don't have a ton of flow or need a lot of head at your waste station? Still focusing on this clogging issue, Barnes has also

launched a new and improved grinder platform. The Razor grinder pump is the ideal 2-hoursepower pump for light commercial and residential solids handling applications.

With the Razor's thoughtfully designed innovative axial cutting technology, it is engineered to efficiently reduce solids like flushable wipes, diapers, and other non-biodegradable items. This grinder product is especially useful in pressure sewer systems. The Barnes' pressure sewer system with the Razor grinder can reduce installation

limit the overall environmental impact of the sanitary sewer system. Its flexible capabilities allow it to be a turnkey solution or easily integrated into existing systems.

costs, increase system flexibility, and

SEWAGE EJECTORS AND SUMP PUMPS

Barnes' innovation doesn't stop there.
Their offering expands to sewage
ejectors and sump pumps that are used
in smaller applications as well. Designed
for long operational life, quiet operation,
and dependable service, Barnes has
your residential needs covered.

YOUR TRUSTED PARTNER IN INNOVATION

The Barnes brand from Crane Pumps & Systems is a leader in the design and manufacture of advanced pump solutions for wastewater applications of all sizes. They

wastewater transportation and management, setting the bar higher with each innovation. From larger

are your trusted partner in

applications that require chopper pumps down to residential sumps,

the customer's needs are always at the forefront. Barnes is dedicated to solving the problems of the modern waste stream and will

continue to be a leader in the development of new technologies. ■



BARNES

envie



Premium Efficient Non-Clog Pump Solution

VERSATILITY MEETS PERFORMANCE



Whether you need a chopper, non-clog, submersible, dry pit, horizontal, or vertical pump, envie³ has you covered with a versatile portfolio that will solve all your needs.

Elgin Separation Solutions

s a leading turn-key solutions provider for liquid/solids separation, dewatering, and waste management operations, Elgin Separation Solutions recognizes the need for reliable and efficient slurry pumps when managing abrasive solids-laden fluids. Whether you are looking for high quality centrifugal, positive displacement, self-priming, or submersible pumps, Elgin can provide customized solutions with in-house engineering and design services tailored to your operations. Additionally, Elgin's global field service team is available to commission, train, and service your pumping process to ensure smooth operations.

DUROLAST RB/NE™ PUMP

Elgin's DuroLast RB/NE™ abrasion-resistant slurry pumps are designed specifically to handle abrasive materials encountered in water-based or oil-based pumping operations. Whether used independently, as a stand-alone unit, or as part of Elgin's turn-key solutions, these pumps enhance performance and prolong pump life compared to traditional models.

The DuroLast RB/NE™ is built for durability and features several innovations to ensure superior performance in various environments, including seawater, freshwater, drilling mud, as well as industrial applications like cement and mining dewatering. Each pump is equipped with an HDPE Polyurethane or Nitrile Rubber liner to protect against extended wear from abrasive and corrosive materials. Moreover, a premium heavy-duty mechanical seal prevents fluid

leakage and improves efficiency when handling high temperatures and highly abrasive substances. Our onboard thermal siphon technology safeguards the pump from run-dry conditions and maintains optimal temperatures within the mechanical seal.

PROGRESSIVE CAVITY PUMP

For consistent feed pressure and balanced operations, Elgin offers custom-configured progressive-cavity feed pumps (PC pumps). These pumps can optimize centrifuge performance, extend their lifespan, and reduce overall operational and maintenance costs when properly operated.

Elgin's PC pumps are paired with high-quality gearboxes and energy-efficient, explosion-proof motors designed for continuous duty. The split coupling body allows quick and easy maintenance without disconnecting the pump, significantly reducing downtime.

Elgin PC pump packages can be supplied in a variety of skid configurations (i.e., wide field skid and narrow plant skid), as a mechanically-variable gearbox or a direct gearbox with inverter-duty, VFD-driven motor, and a variety of motor installation configurations (i.e., in-line, offset, and "piggy-back").

SELF-PRIMING PUMP

Elgin's self-priming, solids-handling pumps are engineered to handle solids-laden fluids with minimal maintenance requirements. These pumps feature a large volute that automatically re-primes in an open system without complex plumbing.

Depending on the application, Elgin's self-priming pumps feature cast iron casing and bearing housing, ductile iron impeller and wear plate, and heavy-duty mechanical seal. Maintenance can be performed on-site without special tools or disconnecting plumbing, thanks to accessible components like the dual-vane impeller, seal, wear plate, and flap valve.

PITBULL SUBMERSIBLE™ PUMP

Elgin's line of solids-handling submersible pumps are designed for reliable performance with minimal maintenance for today's trenchless and hydrovac operations. These pumps feature a non-clogging design and top discharge port for heavyduty applications, making them ideal for various industries. The PitBull Submersible™ pumps are built with durability in mind, featuring a cast iron housing, high chrome alloy impeller, steel striner, easy access oil maintenance port, and safety chain coupling for the power cable. Safety features include "circle thermal protector" and "motor coil protection" that protects the pump in event of motor overheating.

Inquire today about Elgin
Submersible Pump Trade-In and
Core-Exchange Program that allows
customers to trade-in old pumps
for credit or exchange them for
refurbished replacements at a
discounted price.

Depending on your pumping operational needs, Elgin Separation Solutions has the turn-key solution to maximize operations with full engineering support, field service, and OEM parts.

Contact Elgin today or visit our website to discover how our innovative solutions can enhance your pumping and solids separation operations. For more information, visit www.elginseparationsolutions.com.



500 GPM Progressive Cavity Pump

MELGIN

One Stop Shop for all your **Slurry Pump Operations**

The first step to efficient solid/liquid separation is through a quality slurry pump. Here at Elgin, we offer a variety of slurry pumps to fit any of your operations.



DuroLast RB/NE™ Pump

Self-Priming Pump



Progressive Cavity Pump

PitBull Submersible™ **Pumps**

A FLAGSHIP BRAND OF









www.elginseparationsolutions.com/slurry-pumps

Gorman-Rupp Pumps

orman-Rupp has been revolutionizing the pumping industry since 1933. Many of the innovations introduced by Gorman-Rupp over the past ninety years have become industry standards.

We continue to update our machinery, processes, research and development, and engineering to ensure that our pumps and systems are among the most reliable and efficient on the market. With nearly one million square feet under roof, our facilities house some of the most modern manufacturing, testing, and warehousing facilities in the world. Our experienced engineers take advantage of the latest technologies and innovations to custom-design, manufacture, and assemble our products.

With over one million Gorman-Rupp pumps installed to date, we have the knowledge and experience understand your specific application. We provide solids- and clean-fluid handling pumping solutions for municipalities, industrial plants, construction and rental businesses, refineries and petroleum plants, mining sites, agricultural operations, and a variety of original equipment manufacturers.

One of our most successful and innovative lines of pumps has been our self-priming models. Gorman-Rupp also manufactures complete lines of submersible, priming-assisted (dry-prime), standard centrifugal,

horizontal end suction centrifugal, and rotary gear products built for the most aggressive pumping applications. In addition, our ReliaSource® pump packages that incorporate these products are designed, manufactured, and tested and include pumps, motors, piping, and controls to ensure superior operation and easy installation.

We perform rigorous testing based on Hydraulic Institute Standards and test to customers' actual operating conditions in our one-of-a-kind testing facility guaranteeing innovative, superior-quality products that are ready to tackle your toughest jobs. To ensure you get the right equipment for your requirements, Gorman-Rupp partners with a worldwide network of distribution and provides them with the most extensive training. Gorman-Rupp distributors will work hand-in-hand with you to recommend, customize, and specify equipment. And Gorman-Rupp is always available should you ever require any assistance.

PHILOSOPHY

Gorman-Rupp stands behind the quality of our pumps to ensure they meet your requirements for the long haul. To maintain industry-leading client satisfaction well beyond product installation, we offer a variety of services to meet your needs, including world-class training, service, and industry-leading warranty.





INDUSTRY-LEADING SUPPORT AND WARRANTY

Gorman-Rupp stands behind the quality of our pumps to ensure they meet your requirements for the long haul. To maintain industry-leading client satisfaction well beyond product installation, we offer a variety of services to meet your needs, including:

INDUSTRIAL

If your application deals with abrasive, corrosive fluids, or liquids containing large solids, we have the right pump for the job. Gorman-Rupp pumps are constructed in a variety of materials to move fluids in steel mills, paper mills, underground mines, food processing, automotive and chemical plants, canneries, power plants, tanneries, glue and resin plants, and any other facility where dependability and ease of service are essential.

MUNICIPAL

When you choose Gorman-Rupp, you benefit from one of the largest and highest quality lines of municipal pumps, engine-driven pumps, sewage lift stations and water booster/reuse stations available on the market. Our ReliaSource® packaged lift and booster stations ship complete from the factory with pumps, motors, and controls and are 100 percent tested before they leave the facility to ensure product efficiency and operation.

GORMAN-RUPP PUMPS

P.O. Box 1217 Mansfield, Ohio 44901





New sewage, poultry waste, plastic bags, hair, stringy material and other clog-prone materials can wreak havoc on pumps. That's why you need a dependable solution for handling solid waste. Gorman-Rupp's innovative Eradicator® Solids Management System upgrade kit for Super T Series® pumps offers just that. The aggressive self-cleaning wearplate and back cover assembly, incorporating an obstruction-free flow path, are designed to handle clog-prone material, keeping your pump operating at peak efficiency. A lightweight inspection cover allows for easy access to the inside of the pump without affecting wearplate-to-impeller clearance. And, the Eradicator can be easily installed into existing Super T Series pumps in the field.

Trust Gorman-Rupp pumps to keep your operation running smoothly month after month, year after year.

Mueller Water Products

ueller Water Products, Inc. is a leading manufacturer and marketer of products and services used in the transmission, distribution, and measurement of water. Since 1857, Mueller has been helping municipalities increase operational efficiencies, improve customer service, and prioritize capital spending, demonstrating why Mueller Water Products is Where Intelligence Meets Infrastructure®.

COMMITTED TO SAFE DRINKING WATER

From life-saving fire protection to data intelligence, we are committed to developing products and solutions that help cities and water utilities deliver clean, safe drinking water. Our broad product and service portfolio includes engineered valves, fire hydrants, pipe connection and repair products, metering products, leak detection, pipe condition assessment, and software that provides critical water data.

When you invest in water infrastructure, quality matters. That is why we select rugged materials and build state-of-the-art software—to provide products and services that are designed and engineered for the long run. When you choose Mueller, you choose a lasting value that can ultimately translate into cost savings.

SERVING ALL YOUR WATER DISTRIBUTION NEEDS

Mueller is one of the only companies that can fulfill your water system needs from end to end – at the source, at the plant, below the ground, on the street, and in the cloud. Built on a legacy of innovation, we have the vision and expertise to provide advanced infrastructure and technology solutions for transmitting, distributing, measuring, and monitoring water more safely and efficiently than ever before.

Mueller brands provide products and solutions for:

FLOW CONTROL SOLUTIONS

Mueller offers a full line of products for controlling water safely and efficiently across your distribution system, including valves and control systems. And for easy and effective maintenance and repair, we offer superior service line connection products and equipment.

Products in this category include:

- Valves: resilient wedge gate, metal seated gate, butterfly, check, plug, cone, air release, knife gate, slide gates, and more
- Water Network Connections: drilling and tapping machines, service brass, and pipe repair
- Control Systems: pressure and flow

FIRE PROTECTION SOLUTIONS

Safety is built into every Mueller® solution. All our fire protection solutions are compliant with Underwriters Laboratories and Factory Mutual requirements.

Products in this category include:

- Valves
- Hydrants
- Hydrant security
- Indicator posts
- · Tapping materials

PIPELINE MANAGEMENT TECHNOLOGY

Proven technology that enables utilities to assess and optimize water networks.

Products in this category include:

- Pipe condition assessment
- · Pipeline monitoring
- Lead detection
- · Leak detection
- Software: utility dashboard, monitoring services, notifications

METERING AND COMMUNICATION TECHNOLOGY

Smart metering paired with the Mi.Net® Advanced Metering Infrastructure (AMI) system and Sentryx™ Water Intelligence Platform provides water network agility and enables utilities to connect meters to

their AMI network in specific areas or across the entire distribution system by leveraging existing cellular infrastructure—eliminating the need for maintenance.

Products in this category include:

- Meters: residential, commercial, industrial, fire service, registers, valves, setters, and boxes
- **Communications:** endpoints and data loggers
- Software: water intelligence platform for water utilities to monitor, control, and monetize water distribution networks.

 Utility dashboard, billing consumer information software, customer portal, and leak/ network operation services
- Services: field operations, network operations center, network-as-a-service

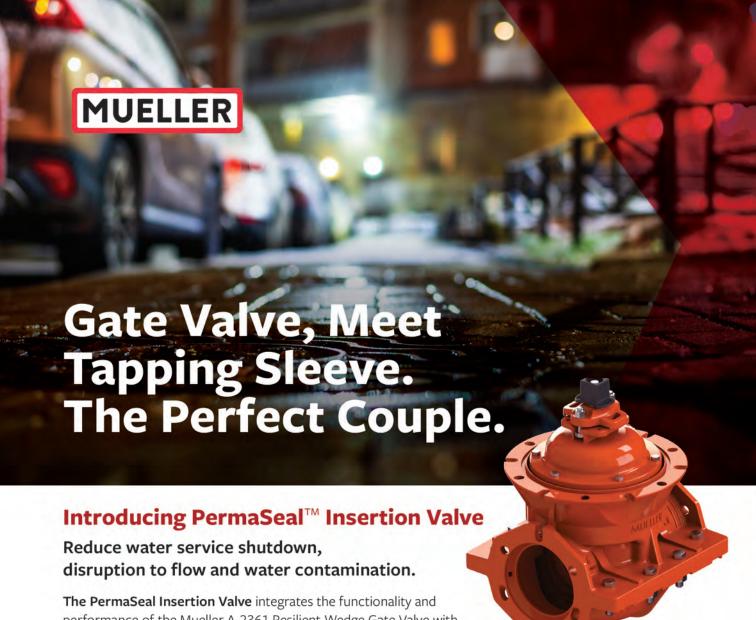
THE MUELLER ADVANTAGE

Mueller solutions are born from the collective products, services, and professionals in our family of the most trusted companies in the industry. Together, we are a consultative, dedicated team of engineering, sales, support, and distribution experts working collaboratively toward one goal—your success.

We go above and beyond what's expected to help your water infrastructure system work harder and smarter and last longer, now and in the future. And we continue to invest in innovative ways to help you see insights across your system so you can proactively address concerns, extend the life of your operations, and improve your customer service and bottom line.

Mueller Water Products brands include Mueller®, Echologics®, Hydro Gate®, Hydro-Guard®, HYMAX®, i2O®, Jones®, Krausz®, Mi.Net®, Milliken®, Pratt®, Pratt Industrial®, Sentryx™, Singer®, and U.S. Pipe Valve and Hydrant.

For more information, visit www.muellerwaterproducts.com.



The PermaSeal Insertion Valve integrates the functionality and performance of the Mueller A-2361 Resilient Wedge Gate Valve with the Mueller H-600 Series Ductile Iron Tapping Sleeve to allow for insertion into existing water mains with minimal service disruption and dependable functional service life.



Ready to learn more?

Scan the QR code to get started.



MUELLER* | ECHOLOGICS* | HYDRO GATE* | HYDRO-GUARD* | HYMAX* | i20* | JONES* | KRAUSZ* | MI.NET* | MILLIKEN* | PRATT* | PRATT INDUSTRIAL* | SENTRYX* | SINGER* | U.S. PIPE VALVE & HYDRANT

Vaughan Chopper Pumps

HOMEGROWN RELIABILITY

stablished in 1960, Vaughan Company® is the industry leader in reliable chopper pumps and mechanical hydraulic mixing systems. With more than sixtyfour years of experience and four generations of expertise, Vaughan Company remains committed to giving customers around the world outstanding service and the most dependable pumping solutions.

American-made and built to last, our pumps and systems are available in a variety of sizes and configurations to meet the unique needs of any operation. We have your back with a range of durable pumping solutions to eliminate lift station clogging and handle the toughest solids. Vaughan promises you the best in product design, reliability, dependability and availability—plus, superior service and support to bring life cycle costs to the lowest they can be. All while meeting the requirements to receive federal aid under the Build America. Buy America (BABA) act.

To maintain our position as the industry leader, Vaughan Company takes full advantage of cutting-edge technology. We incorporate in-house 3D computer modeling, which allows us to create exact fits and precision castings for all components.

All of this leads to one simple point: when you buy Vaughan, you get the best.

WORLDWIDE LIFT STATION SOLUTIONS THAT GO BEYOND THE BARN

Since the late 1950s, "What could make this better?" was the unwavering motivation Jim Vaughan used to invent the world's first chopper pump. After countless hours of repairing clogged manure pumps for local dairy farmers, he knew there had to be a solution. Jim officially introduced the world's first

chopper pump in 1960, and Vaughan Company was born. His brilliant idea met a genuine need that had applications far surpassing the dairy farm.

In the decades since, our operations expanded significantly, providing high-performing and exceptionally reliable pumps across the globe. With over 40 worldwide issued or pending patents, Vaughan company has your back anywhere -from prisons to dairy farms, wastewater treatment plants and more.

We're still motivated by Jim's initial question: "What could make this better?" In the most extreme environments where standard nonclog pumps fail, our lift station solutions provide dependable, clog-free chopping and mixing.



BENEFITS OF BUYING AMERICAN MADE

For federally funded projects, Vaughan pumps and pumping equipment meet all requirements to receive federal aid under the BABA act. Nearly all Vaughan Company materials are produced in the United States and constructed in Vaughan's 140,000-square-foot Washington state-based manufacturing facility. With an extensive \$10M inventory and strong relationships with domestic suppliers and foundries, Vaughan ensures reliable quality and fast lead times.

Not to mention, each chopper pump or mixing system is custom-built to meet the end user's specific needs. Even without current supply chain disruptions, global sourcing would not allow for this level of customization within a feasible timeline. In addition to fast builds, our manufacturing facility holds a large surplus of spare parts, so Vaughan products are easily maintained.

Knowing that every pump user faces a unique situation, Vaughan Company also has local sales representatives across the country to provide exceptional customer service when it is needed most—whether that is working closely with customers to tailor pump solutions for an exact situation or providing post-installation support.

PRODUCTS THAT SUPPORT AMERICA

Today, we're still passionate about that original question: "What could make this better?" While Vaughan's locally sourced and American-made chopper pumps keep projects moving, their benefits don't stop there.

The answer to Jim Vaughan's question extends beyond the walls of the manufacturing facility. As a major local employer, we strive to strengthen our community by giving to charities and community organizations. Our scholarship program supports graduates of the Elma and Montesano school districts who are planning to pursue a post-secondary degree or technical certificate in the water and wastewater sector.

Vaughan products are not just made in America, they also support the future of America. ■

To learn more about American-made Vaughan Chopper Pumps, Rotamix® hydraulic mixing systems, and our other specialty products, contact the company at:

888.249.CHOP (2467) info@chopperpumps.com www.chopperpumps.com





Since 1960, Vaughan Company has been manufacturing the toughest no-clog pumps in the USA. Our 3rd and 4th generation family-owned and operated company builds cutting edge products that are built to last and keep things flowing smoothly.

Choose the unmatched reliability of Vaughan.

Ask about our free trial program and on-site demos.



Boerger

Boerger designs, manufactures, and sells rotary lobe pumps, macerating technology, separation technology, and feeding technology to convey low to high viscous and abrasive media. Key applications can be found in wastewater and sludge treatment, in the chemical and paint industry, in paper and pulp manufacturing, the petrochemical and oil industries, agriculture and biogas, and many others.

The company's success began in 1975 with a plan to build a low-maintenance pump of the highest quality. Today, Boerger is a market leader in elastomer coated rotary lobe pumps and an expert in macerating technology. It is represented in more than sixty-five countries and remains on course for growth. Not only is it a global player, but it is also an independent, family-owned company. Boerger's guiding

principle has always been to make things better. It has remained true to the guiding principle for all its products—combining a long service life with low maintenance. The aim is to keep improving current products and launch new technology.

PRODUCTS

Boerger's core product, the BLUEline rotary lobe pump, is a self-priming, valveless, positive displacement pump delivering flow rates up to 7,000 gallons per minute. This heavy-duty pump has dry-run capabilities and is often used for loading and unloading by reversing the flow direction.

The ONIXline rotary lobe pump is a compact, energy-efficient pump used when other pumping systems reach their limits. At the heart of the ONIXline pump are newly developed rotors that help to ensure gentle and

almost pulsation-free operation while achieving maximized efficiencies at high pressures.

Boerger also offers a comprehensive lineup of macerating equipment for grinding coarse materials, solids and stringent debris, including the vertical Multicrusher for confined space conditions.

MIP-DESIGN

Repairs and downtime cost time and money. Working hours should not be spent on maintenance. That's why all the Boerger products are designed with maintenance-in-place (MIP). This allows for all wetted parts to be easily replaced through the front cover without the removal of pipe or drive systems.

Boerger only provides users with high-quality, high-performance products with low maintenance.



Check-All Valve Mfg. Co.

Since 1958, Check-All Valve Mfg. Co. has manufactured a complete line of in-line spring-loaded pistontype check valves. With worldwide service, Check-All Valve serves a wide range of industries including the chemical, petrochemical, pharmaceutical, food and beverage, water treatment, OEM, MRO, and many others. Lightweight, efficient, and rugged, every Check-All valve is designed and built to perform to exact needs and specifications. The company is ISO 9001 certified and manufactures product lines compliant with CE/PED requirements, Canadian Registration Number guidelines, 3A Sanitary Standards, and others.

Check-All valves are engineered for silent operation. They close quickly and smoothly to eliminate hammer noise. They are designed to function equally well in either a vertical or horizontal position, with proper spring selection. They are also designed to reduce installation costs. The insert series check valves easily fit into existing line components, which reduces initial cost and installation time. The seating surfaces are parallel to each other thereby eliminating the excessive wear occurring in plug, cone and ball seats. Check-All valves can also be used as low-pressure relief valves and vacuum breakers.

With many styles available, Check-All Valve provides check valves for practically every service application. Valves are offered with metal-to-metal or soft seats in sizes ranging from 1/8-inch NPT to 20-inch flange connections. Pressure ratings are available from full vacuum to 10,000 PSI. Standard or exotic materials are available and you can choose from a wide variety of spring settings and seat materials for any valve. Most options are available with fast delivery. Specially designed valves are another option that Check-All Valve performs on a regular basis. Check-All Valve Mfg. Co. is staffed to supply you with a quality product as well as personal technical services.

CHECK-ALL VALVE MFG. CO.

Contact us for a complete catalog or see us at www.checkall.com.



Electro Static Technology

Electro Static Technology, an ITW Company, is proud to lead the charge in creating innovative solutions for the challenges facing manufacturers and users of rotating equipment and pumping systems worldwide. Our AEGIS® Shaft Grounding Rings represent a breakthrough in protecting electric motors, pumps, and their vital components from electrical damage caused by stray voltage, particularly from variable frequency drives (VFDs).

AEGIS® Shaft Grounding Rings surround rotating equipment shafts with hundreds of thousands of conductive microfibers, safely discharging stray voltage before it builds up enough to arc through and damage the equipment's bearings. Motors, pumps, and other rotating equipment are protected against premature failure, and equipment users are protected from the expense of unplanned downtime and headaches of equipment repair or replacement.

Our dedication to reliability and performance has made AEGIS® Shaft Grounding Rings the solution for safeguarding pumps and pumping systems. Whether you're dealing with a small-scale pump or a large industrial system, AEGIS® offers a range of ring and mounting options to suit your specific needs. Our rings can be mounted internally or externally, on brackets or press-fit into bearing caps. They are also available factoryinstalled in a wide array of motor lines from major manufacturers.

What sets AEGIS® rings apart from other shaft grounding products is their minimal need for maintenance, virtually frictionless operation, and long wear life (up to 200,000 hours, according to lab testing). They are also installable in, and available factoryinstalled in, explosion proof (XP) motors, per approved UL procedures.

Join pump users around the world who have made AEGIS®

Shaft Grounding Rings a part of their reliability plan to help keep their operations running smoothly. To download the handbook and discover how AEGIS® can increase the reliability of your pumping systems, visit www.est-aegis.com/handbook.



Fuji Electric

REACH THE PINNACLE OF PERFORMANCE AND RELIABILITY

For 100 years, Fuji Electric's quality products and world-class applications expertise has supported businesses to reach new levels of success. We deliver high-performance and energy saving AC Drives and HMI products. Our goal is to manufacture the highest quality, superbly engineered, innovative products, which have been incorporated into the company since the beginning. Learn more about our dedication as a manufacturer of quality power devices!

Fuji Electric offers highperformance AC Drives with automatically controlled motor operations and operating speeds for a wide variety of drive applications in irrigation, oil and gas, manufacturing, food and beverage, and much more. Ideal for OEMs, the **FRENIC-Ace** is a high-performance, full-featured drive designed to suit a wide variety of applications. The FRENIC-Ace offers advanced integration capabilities including applied power ratings, sensorless dynamic torque vector control, PM synchronous motor control, two-channel on-board RS485 communication port, and customer customizable logic.

Fuji Electric's compact inverter, FRENIC-Mini (C2) Series, provides excellent performance for both single-phase and three-phase applications and is available in multiple configurations to support 1/8 horsepower up to 20 horsepower AC drives / variable frequency drives (VFD) / v/ Hz vector drives. With an expanded range of rated voltages, the new FRENIC-Mini (C2) strikes an optimal balance between price and performance.

Fuji Electric has raised the bar for inverter performance with the **FRENIC-MEGA** variable drive. Offering expanded power ratings and flexible configurations that support 1/2 horsepower up to 1,000 horsepower AC drive/variable frequency drive (VFD) / v/ Hz vector drive applications—these inverters are designed for long lifecycles and improved maintenance functions.

The MONITOUCH V10 Series is the new standard for high-speed HMI. Focusing on the six basic performance aspects of HMI: rendering, operation, communication, startup, transfer, and custom code, the V10 series was developed with the aim of stress-free operation. Industry-leading performance is achieved by adopting quad-core CPUs and optimizing applications.



Greasezilla FOG Separation Systems

BY DOWNEY RIDGE ENVIRONMENTAL COMPANY

Greasezilla'sSM patented separation technology solves fats, oils and grease (FOG) treatment and disposal challenges worldwide. Developed by Downey Ridge Environmental Company, the turnkey system repurposes FOG to produce a high-quality, low-moisture advanced biofuel (ABF) commodity, offering an eco-friendly and profitable alternative to chemically treating, lagooning, landfilling, incinerating, or dumping FOG waste.

GreasezillaSM leaves almost nothing to be landfilled and has a total operating cost of 1 to 2 cents per gallon, making it the ideal front-end pretreatment system for FOG waste. GreasezillaSM eases the financial sting of ever-increasing disposal fees and labor costs while generating revenue.

SIMPLE TO INTEGRATE

- Allen Bradley® Programmable Logic Controller with SCADA integration for remote monitoring
- Scalable to meet changing needs
- Available in modular or cylindrical formats to accommodate interior or exterior placement

ECO-FRIENDLY

- Diverts the FOG waste stream from landfills
- No chemicals, polymers, or additives
- Recovers a low carbon intensity (CI), brown grease ABF feedstock

COST-EFFECTIVE

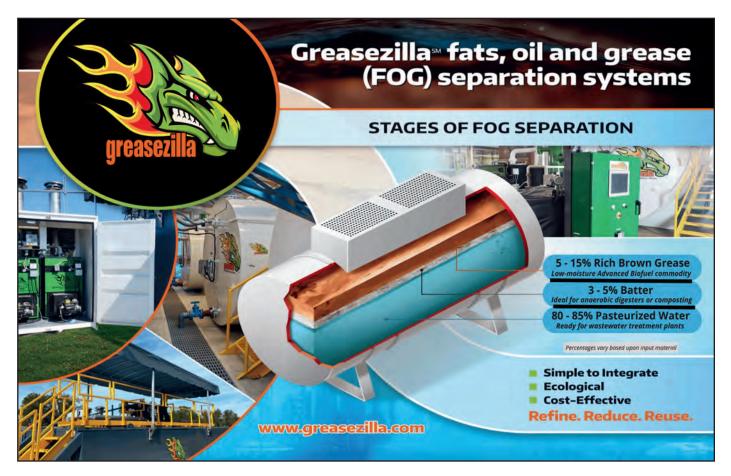
 Reduces costs associated with FOG treatment and disposal



- High EBITA / Quick ROI
- Assured revenue from sale of brown grease ABF commodity
- Promotes best practices that protect sewer infrastructures

By recovering and repurposing fuel resources from a nuisance waste, GreasezillaSM is helping the industry transform a negative value waste stream into a useful biofuel commodity for a more sustainable world. To learn more about Greasezilla, contact us at 304.658.4778 or visit

www.greasezilla.com.



SealRyt

Introducing the DuraPack™ System from SealRyt®—a game-changer in industrial sealing solutions. Crafted custom for your application, this hybrid system merges the reliable bearing support of PackRyt® with SealRyt's patented Structural Lantern Ring (SLR™) System, offering unparalleled performance in sealing applications.

Each DuraPack™ System is custom-made to suit individual applications, ensuring a perfect fit every time. Gone are the days of wastage and errors—with DuraPack™, you get what you need, eliminating unnecessary expenses and minimizing downtime.

SealRyt®'s commitment to excellence is evident in every aspect of the DuraPack™ System. Developed bearing compounds, rigorously tried and tested, guarantee durability and reliability in

the most demanding environments. The system also incorporates SealRyt® developed braided textiles, ensuring optimal performance under various operating conditions.

Thanks to pre-cut, die-formed components, installation is a breeze, saving valuable time and resources. The DuraPack™ System features a bearing with a separate lantern ring, offering versatility and ease of maintenance. Its non-collapsible design ensures stability within the stuffing box, even in worn equipment.

With multiple bearings, lantern rings, and packing configurations available, the DuraPack™
System adapts to diverse sealing requirements with ease. Experience improved flow and pressure



flow turbulence
and enhancing
operational efficiency.
The innovative SLR™ design
not only provides shaft stability
but also boasts excellent flush
capacity, maintaining optimal sealing
performance without crushing or
shifting. Additionally, the SLR™s
unique construction resists clogging

and is easily removable for hassle-

free cleaning and maintenance.

equalization,

minimizing

Whether you're dealing with new pumps or worn equipment, the DuraPack™ System delivers unmatched sealing performance. Say goodbye to down-time and hello to seamless operations with SealRyt®'s DuraPack™ System—the ultimate solution for your sealing needs. ■



Trillium Flow Technologies

Trillium Flow Technologies™ is a global designer, manufacturer, and service provider of engineered pumps and valves for critical infrastructure, energy, and industrial applications. Our product portfolio serves our customers in the water and wastewater, power generation, oil and gas, mining, and general process industries.

In the United States, our pumps business boasts more than 220 years of combined experience providing reliable and efficient solutions that perform in the most demanding environments. We design, manufacture, and test our entire U.S. pump brand portfolio from our state-of-the-art facility in Fresno, California.

Floway® Pumps are an industryleading vertical turbine pump in the water and wastewater, oil and gas, mining, energy, and industrial markets. Floway® pumps can be manufactured to API, HI, and NSF requirements, using the most durable wear and corrosion-resistant materials.

Our Roto-Jet® brand encompasses high-pressure, single-stage centrifugal pumps with Pitot tube technology for low-flow, high-head applications and can be manufactured to API requirements. The Pitot tube's simple design and performance have earned the Roto-Jet® brand a reputation as the reliable and robust "go-to" solution for low-flow, high-pressure challenges.

WEMCO® is known for reliable centrifugal screw and vortex pumps with an international distribution network. WEMCO® pumps have served municipal and industrial customers in markets as diverse as water and wastewater, agri-food, solid bulk and sand applications, chemicals, and general industry for over fifty years.

The WSP® brand serves the global food and beverage processing, waste management, and material processing industries, and are designed to be rugged and dependable while simplifying maintenance and reducing life cycle costs. Our WSP® line can be manufactured according to strict API, HI, and NSF requirements.

Also included in our global pump portfolio are Begemann®, Gabbioneta Pumps®, and Termomeccanica Pompe, manufactured at our facilities in Italy. Trillium Flow Technologies™ provides complete international support, starting with highly engineered, reliable products for your industry and continuing with a unique level of support and service. Learn more about the performance engineered difference at www.trilliumflow.com.

WEMCO® is a registered trademark of FLSmidth. \blacksquare



Valmet

Valmet is a leading global developer and supplier of process technologies, automation and services for the pulp, paper, and energy industries. With our automation systems and flow control solutions we serve an even wider base of process industries. Our more than 19,000 professionals around the world work close to our customers and are committed to moving our customers' performance forward.

Valmet's Flow Control business line is focused on delivering mission-critical flow control technologies and services for the continuously evolving process industries. We help our customers to improve their process performance and environmental efficiency, and to ensure the safe flow of materials. We drive profitable growth and sustainable productivity across our customer industries.

Our extensive portfolio consists of industry leading valves, valve automation, pumps, and related services, including the renowned Flowrox™, Neles™, Jamesbury™ ja Neles Easyflow™, Stonel™, and Valvcon™ solutions. Our pumps. valves, and valve automation technologies are known for quality, reliability, and highest safety. We serve variety of process industries, including pulp, paper and bioproducts industry, renewable energy, oil and gas refining, mining and metals processing, chemicals, and other process industries.

Flowrox pumps serve a wide range of process industries. Flowrox LPP-T transfer pumps incorporate advanced single roller design which eliminates friction and lowers energy consumption. They are ideal for pumping various slurries and

dosing a wide range of abrasive, corrosive, viscous, or crystallizing media. Energy efficiency, long hose life, and low maintenance generates substantial savings during the lifecycle of peristaltic pumps. Lifetime of Flowrox pumps' hoses is 3 to 5 times longer than conventional hose pumps. The LPP-T100 is one of the world's largest hose pumps, with a maximum continuous flow of 100 cubic meters per hour.

For chemical dosing applications that require accurate metering we provide FXM tube pumps, and for thick paste pumping applications with high viscous, corrosive, or sensitive media we recommend Flowrox progressive cavity pumps.

For more information, visit www.valmet.com/flowcontrol/pump.



WorldWide Electric Corporation

WorldWide Electric is a leading manufacturer of dependable electric motors, motor controls, gear reducers, and generators. Offering fast, often same-day, shipping from eight regional warehouses, WorldWide Electric takes pride in providing a competitive edge to our customers by responding to their requirements with urgency, technical expertise, and professionalism. In January of 2024, WorldWide Electric added to its overall capabilities and market presence with the strategic acquisition of North American Electric, Inc. For twenty-five years, WorldWide Electric has been a leading provider of electric motors, motor controls, and gear reducers. This is WorldWide Electric's fourth acquisition in as many years, including: Louis Allis, a company with a rich history and over 100 years of experience manufacturing and servicing large, custom AC and DC electric motors, Georator Corporation frequency convertors and generators, and Gleason-Avery, a manufacturer of quality fractional and sub-fractional gear motors. As WorldWide Electric continues to evolve, these strategic acquisitions underscore its commitment to growth while maintaining customer centricity in a competitive landscape and offering a comprehensive suite of products and services that meet the diverse needs of its customers.

INDUSTRIAL USERS DEPEND ON WORLDWIDE ELECTRIC

Many of WorldWide's customers are electrical equipment or power transmission distributors that operate local supply and repair businesses throughout the United States. Others are original equipment manufacturers (OEM) or solution packagers that build heavy equipment for demanding applications. They call WorldWide because their customers—industrial

end-users—have an issue: maybe a motor has failed, or their plant, machinery, or process is down. No matter what industry—agriculture, construction, aggregate, material handling, oil and gas, irrigation, wastewater, food processing, or manufacturing—WorldWide knows every moment of downtime reduces productivity and impacts the bottom line. WorldWide's business is setup to deliver with urgency—providing quality products, a large selection of in-stock inventory, and fast shipping, all backed by exceptional customer support.

LOUIS ALLIS

For over a century, Louis Allis has been one of the only companies that can offer drop-in replacements for large and unique electric motors. Many are old, legacy motors that an original manufacturer no longer supports. The manufacturing facility is in Warrior, Alabama, and is certified to ISO 9001:2015. They also can factory recertify, service, rebuild, or repair motors to MIL-SPEC, NEMA MG, IEEE, EASA-AR100, or UL Standards.

NORTH AMERICAN ELECTRIC

The newest member of the WorldWide Electric family of brands, North American Electric has grown its business and reputation since 1993 by offering its customers competitively priced electric motors, motor controls, and gearing. North American Electric operates a world-class UL508A-certified production facility at its Hernando, Mississippi headquarters.

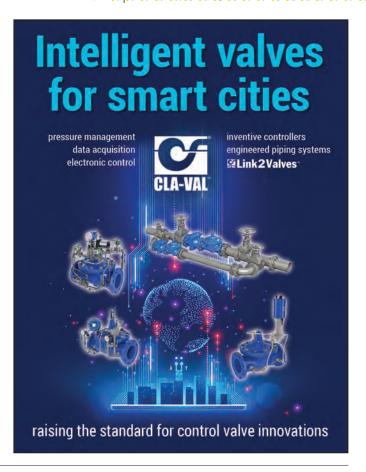


Cla-Val

Since 1936, Cla-Val has produced the world's highest quality automatic control valves for a diverse array of industries. Cla-Val has continued to strengthen its operational and customer service capabilities around the world by enhancing product lines and building state-of-the-art production facilities and warehouses in Canada, Switzerland, France, the United Kingdom, and New Zealand.

With all our major locations having dedicated training centers, our team of sales personnel and factory authorized sales agents are able to provide exceptional industry expertise throughout the world. Our aggressive research and development programs have resulted in the design and production of technologically advanced electronic and hydraulic control systems that consistently meet the challenges of increasingly complex and diverse applications.

CLA-VAL 800.942.6326 info@cla-val.com • www.cla-val.com



FELUWA Pumps USA

FELUWA Pumps USA is a 122-year-old—and only—worldwide manufacturer of double hose diaphragm and smaller high pressure flat diaphragm pumps with sales offices around the world and now in the United States. Our name: FE LU WA was created from the German words: FE-Feuer, meaning fire; LU-Luft, meaning air; and WA-Wasser, meaning water. As a member of the Arca Flow Group, we developed our new double-hose diaphragm pumps into the MultiSafe and EcoSafe product lines. These cover the range from lower pressures and higher heads, to very high flow of up to 4,300 gallons per minute and pressures to 5,000 psi, but with the same design features as the MultiSafe. There are no other pumps of this kind in the market with a double redundancy and monitoring abilities. Our products are ATEX mine certified as well as ISO 14001:2015.

Feluwa Pumps are used worldwide in many industries such as: mining, oil and gas, chemical, petrochemical, autoclave feed, tailings, backfill, tank bottoms, filter press, and municipal applications. With a new U.S. division based in Houston, we continue to serve U.S. customers with direct interaction and support.



Helwig Carbon Products

SHAFT GROUNDING CARBON GRAPHITE SEALS-BUSHINGS-VANES

Helwig Carbon is the premier manufacturer of the industry's best shaft grounding solution as well as precision-machined carbon graphite seals, bushings, bearings, rotors, and vanes. As one of the last American-owned carbon companies, we take pride that our products are made in the USA.

Helwig's BPK (Bearing Protection Kit) is the industry leading shaft grounding solution. Our proven silver graphite brush technology is unlike other grounding systems because it eliminates the need for maintenance and will keep the bearing protected year-after-year. Helwig's BPKs come available with EZ mounting brackets for hassleless field installation or can be ordered preinstalled by the motor OEM.

Our carbon graphite line is self-lubricating and ideal for food processing, chemical, refinery, vacuum pumps, and more. These products are backed by fast, reliable service, high-quality workmanship, and on-time delivery of over 98 percent. With our CNC equipment we can accurately manufacture a wide variety of shapes and sizes and routinely hold tolerances of 0.0005 inches (0.013 millimeters) and 2 HE light bands flatness for seal face surface finishes. All processing is done at our ISO 9001:2015 certified facility in Milwaukee, Wisconsin.



Sun-Star Electric, Inc.

Sun-Star Electric, Inc. is a Texas corporation established in 1977 and is the principal worldwide distributor for Hitachi submersible motors.

Sun-Star Electric, Inc. designs and manufactures its own Sun-Star branded oil-filled and wet-wound submersible motors for standard and special applications along with the deep-ocean-capable Aqua Star motor.

Sun-Star Electric is an expert for rapid service and repair of the power generation industry's critical, high-pressure water-filled boiler water circulating pump motors.

Sun-Star Electric, Inc. maintains a 75,000-square-foot manufacturing facility, which is fully equipped for the manufacture and repair of submersible electric motors and includes full fabrication, machining, winding, and inhouse testing capabilities. In 2011, Sun-Star Electric, Inc. transitioned to an employee-owned company (ESOP).





Thordon Bearings Inc.

Thordon is the world's leading manufacturer of long-lasting non-metallic bearings that require no oil or grease. They are easy to design, safely machined and install quickly. Specifically engineered for vertical pumps, these bearings offer extended wear life, exceptional abrasion resistance, and the ability for dry start-up. Thordon's proven performance in vertical pumps, power plants, sewage and wastewater treatment, refineries, mining, agriculture, and any industry moving water has lowered operating costs.

Our polymer bearings can also be used in aerators, flocculators, screens, butterfly valves, or virtually all applications where greased bronze bearings are currently installed. ThorPlas-White is the newest material in the Thordon bearing family, specifically developed to operate as a drinking water system component used in the treatment and distribution of potable water. It has international certification for NSF/ANSI 61 Drinking Water System Components and NSF/ANSI 51 Food Equipment Materials, as well as WRAS.

By delivering tailored, adaptable solutions, these bearings enhance efficiency, offering cost and time savings through the elimination of grease, reduced life-cycle costs, decreased equipment downtime, and increased mean time between failure (MTBF). Thordon bearing are available and supported globally by its worldwide network of factory trained authorized distributors.



Vertiflo Pump Company

Vertiflo Pump Company, Inc. was established in 1979 to design, sell, and build packaged lift stations. Since 1981, Vertiflo has concentrated on manufacturing industrial pumps including vertical process pumps, sump pumps, end suction pumps, and self-priming pumps in cast iron, stainless steel, and special alloys.

Vertiflo pumps are designed for industrial applications and currently over 30,000 are operating successfully worldwide. As specialists in the design and manufacture of vertical and horizontal industrial quality pumps, Vertiflo is recognized as a quality manufacturer of dependable pumps and continues to grow and encompass new applications in the pump industry.

VERTIFLO PUMP COMPANY

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