General Products

FOUGNER

ENGINEERED SOLUTIONS

Roberts Filter Group

Innovations for Generations

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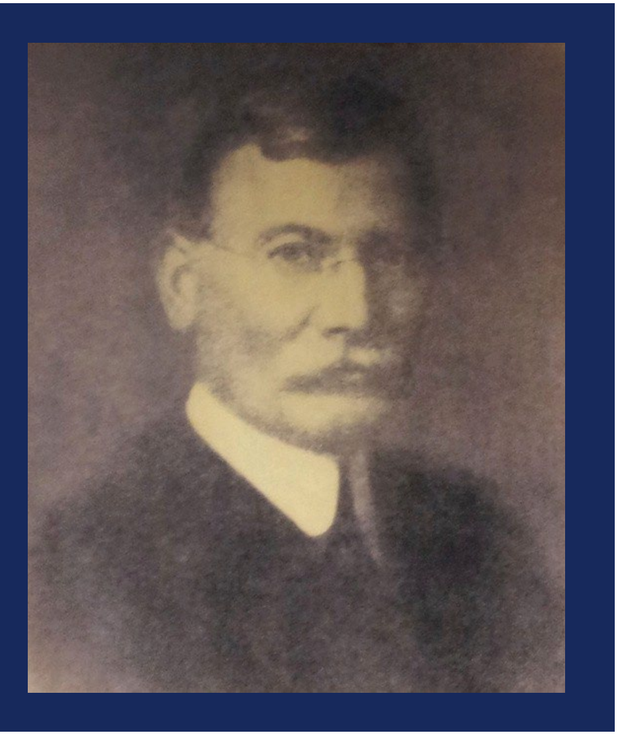
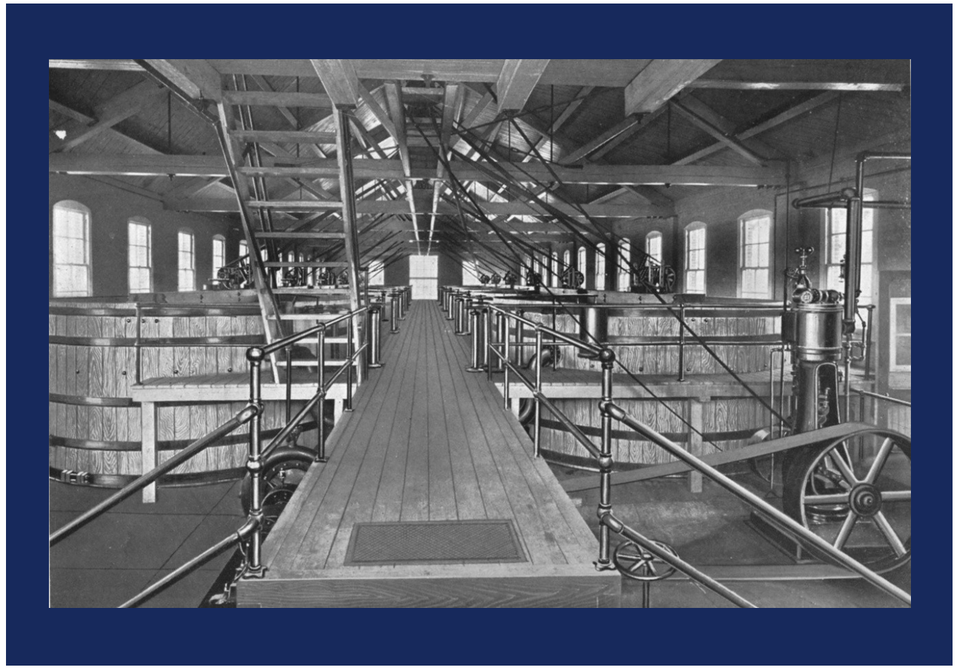
Innovations for Generations

130 years





5 generations

Roberts Filter Group
Innovations for Generations

4,000+

installations worldwide

across 5 continents

Roberts Filter Group is reliable. Some installations in service for 100+ years are still going strong.

Roberts Filter Group
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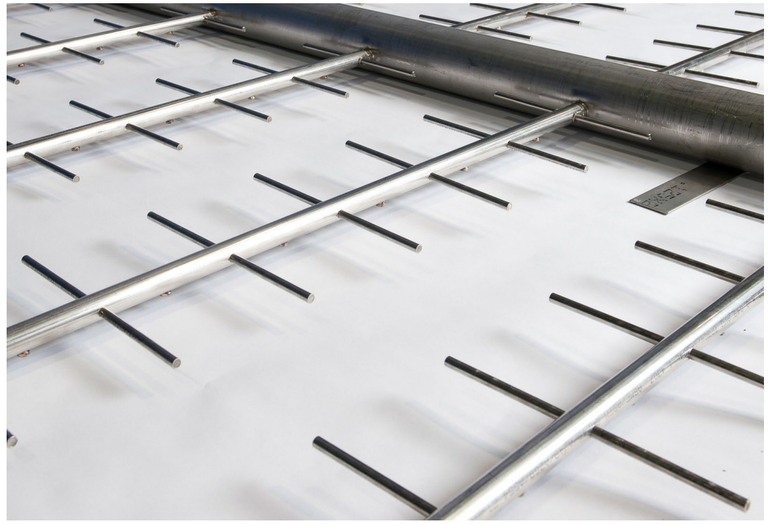
Wide Range of Products



Diversity of products allows Roberts to supply the right solution for every project.

Packaged Filtration Systems

Gravity Filtration Systems

Pressure Filtration Systems

Pretreatment Systems

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World Class Manufacturing

13 Acre manufacturing campus.

On-site hydraulic testing facility, can achieve real-world conditions.

Automated cutting, punching, welding, ensures quality control and timely delivery.

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Gravity Filtration

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Trilateral® SST

Stainless Steel Underdrain

Trilateral® SST is a superior stainless steel underdrain. Many customers have recognized stainless steel underdrains as the best in the marketplace; none of the material drawbacks of plastic underdrains and saves on the expense of concrete solutions. Stainless steel underdrains are ideal for biologically active filters.

Verified Strength

Grout failure is a leading cause of underdrain failure. Trilateral® SST is mechanically secured to the filter floor. The mechanical braces are checked and field verified to ensure pullout strength is met, guaranteeing a great lasting installation.

Double The Thickness

Roberts utilizes an industry leading 14-gauge stainless steel outer shell; double the thickness of some competitors. This ensures protection against unexpected pressure from pumps and water hammer.

3D Media Detention

Roberts utilizes a custom designed “3D” louver to distribute backwash air and water. These slots are supported on 3 sides, preventing deformation over time from water pressure.

Sealed In Tight, All The Way Around

Trilateral® SST is seam welded around the complete exterior shell. This feature provides strength, prevents leaks, breaks, and media intrusion.

Retroliner® Wheeler Underdrain Rehabilitation

Extend the Life of Existing Filters

Retroliner® is the ideal choice for wheeler bottom underdrain rehabilitations. Prevent rotation of porcelain spheres and extend longevity of filter.

Color Coded

Retroliners® are color coded with varying flow distribution orifices
This is accomplished by Superior Flow distribution through modeling and flow planning

Construct And Rehabilitate

With over 75 years of experience in the construction and rehabilitation of Monolithic and Precast Wheeler Bottoms, Roberts' construction crews install and rehab thousands of square feet of underdrains each year.

Structurally Stable

Wheeler Bottom underdrains are the most reliable underdrains ever installed. Many of Roberts' existing installations have been in operation for over 60 years. Wheeler Bottoms are structurally stable and hydraulically balanced to assure many years of trouble-free operation.

Aries®

Air Scour System

The Aries® Managed Air System is a revolutionary filter air scour system. The Aries® is the preferred method of auxillary wash for the cleansing of a filter. It provides thorough cleansing of the entire filter bed versus surface wash systems or passive air systems which are only effective in the top layer of the filter bed.

Easy Installation

Unique installation method easily integrates with old filters. The Aries® Managed Air System can be installed and removed without replacing the filter media, and it is adaptable to any filter design without the need for replacing the underdrain

Cost Saving

Low-cost solution to dramatically improving an old system.

Water Saving

Saves up to 70% of water regularly used in backwash by providing "bottom to top" cleaning action. The location of the Aries® Managed Air System at the gravel/media interface allows the introduction air directly into the bottom of the filter media.

Energy Saving

Twice as efficient as air/water underdrains.

Infinity®
Unibody Underdrain

The Infinity Continuous Lateral Underdrain fundamentally changes the game for filter underdrain systems with its unibody design. The Infinity air/water underdrain is extruded to the exact required length; no breaks, joints, or seals. This unique design feature eliminates joint and seal failure.

Maximize Treatment, Not Underdrain Height.

The Infinity® is only 6” (152 mm) in height. This low profile underdrain design maximizes filter media depth and creating greater freeboard.

Versatile Top Deck Works For Any Filter.

The integrated unibody top deck of the Infinity® can be designed and fabricated to meet the needs of direct media retention (slots) or support gravel (orifices).

Separate Conduits Means Better Distribution.

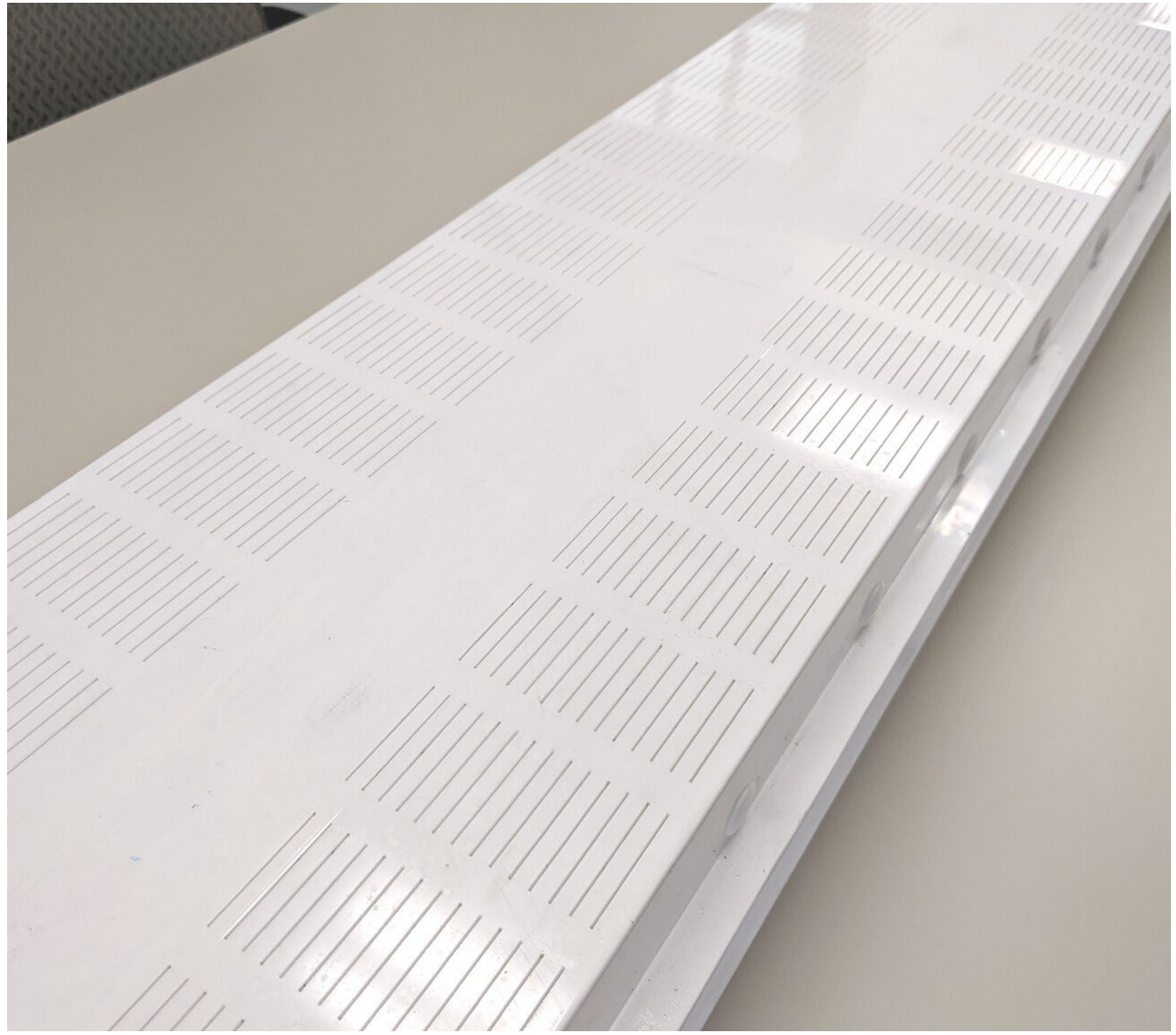
The Infinity®’s 6 channel design separates the primary air and water conduits, preventing water hammer and ultimately underdrain failure. It also ensures great backwash distribution.

Installs Fast And Secure.

The Infinity® comes to the site completely assembled, there are no joints to snap together, no assembly tools required.

Low Headloss, Save The Pumping.

The Infinity® also comes in a low head loss edition that can meet the most demanding needs with head loss as low as 6” (152 mm) at peak backwash flow, while maintaining flow distribution.



Trilateral®

Plastic Underdrain

The Roberts Filter Group’s Trilateral® plastic underdrain filters incorporate innovative hydraulic design to uniquely guarantee balanced flow backwash distribution. Drawing on more than 125 years of industry expertise, the triangular internal chamber is engineered to optimize air scour capabilities in any conditions, without the need for custom design.

Manage Filter Backwash

During a filter backwash cycle, the internal structure must efficiently balance air and water, regardless of changing flow rates or seasonal water temperature fluctuations.

Affordable Solution

Roberts many years of experience with designing and producing new products, affords Roberts to be a leader in the industry. Although not being the first to introduce Trilateral®, at Roberts, we study, evaluate, and Improve where we see a product lacking the final designs to make the product reliable.

Reliable

Combined with a reinforced porous plate and long-lasting material, the Trilateral® plastic underdrain filter is the industry’s most reliable and economical solution.

Packaged Water Treatment

Roberts Filter Group

Innovations for Generations

Pacer® II

Packaged Water Treatment

The Pacer® II is a family of pre-fabricated modular and package dual-treatment water treatment plants that deliver proven results that solve difficult treatment problems, including turbidity, color, iron, manganese, taste, odor, as well as waterborne disease causing organisms. Pacer® II is ideal for locations where raw water turbidity is low to moderate. In a two-step treatment process, the Pacer® II provides an up flow contact clarifier followed by a polishing filter.

Complete Package

This sewage treatment package delivers proven efficiency and reliability in one complete package. It's versatile design, allows it to suit many applications from industrial to municipal to military.

Simple Operation

The Pacer II® system is simple to operate with Roberts' Sentinel® control system. Fully automatic control allows operation with minimal operator involvement. Wash cycles are automatically activated on the basis of elapsed time, head loss and/or turbidity set points.

Cost Effective

The Pacer II® system is cost effective, with lower operational and capital costs than conventional treatment and membrane systems. Thorough engineering and modular design dramatically reduce the installation and startup costs of the Pacer II® system, while still allowing the flexibility to expand as your needs grow.

High Performance Rates

The Pacer II® system consistently produces finished water quality that surpasses Federal and State drinking water standards. Hundreds of successful unit installations are a testament to the Pacer® II treatment system's superior performance, high quality, and ease of operation.

Clarion®

Packaged Water Treatment

Clarion® prefabricated gravity filters meet the filtration requirements of small to medium sized water and wastewater treatment plants in a cost-effective manner. Units are available in two, three, or four-cell designs with cell sizes ranging from 16 square feet to 144 square feet. The compact size occupies less space than conventional water treatment plants, and the modular design is ideally suited for future plant expansion. Initial capital savings are recognized through fast, simple installation and start up of the Clarion® systems.

Effective Design

The Clarion® incorporates the full complement of Roberts' products which are commonly provided on conventional gravity filtration systems. Filter media systems are selected to meet process requirements and maximize net production.

Pre-fabricated Gravity Filter

The Clarion® Model P, potable water treatment plant has ben designed to offer conventional water treatment technology in a prefabricated, packaged system. The coated A36 carbon steel or stainless- steel construction of the Clarion® assures extended plant life and years of trouble free operation. The effluent flow metering system built into the Clarion® Model P assures efficient, constant rates of production.

Pre-fabricated Tertiary Filter

The Clarion® Model T, gravity wastewater plant offers the same corrosion resistant construction and modular design characteristics as the Model P. Each Model T utilizes a ultrasonic level transmitter to control the filter cell effluent valve and maintain a constant filter level to within +/- 3. When the effluent valve is completely opened, and the filter level begins to rise, a backwash sequence is automatically initiated.

Reliant®

Packaged Water Treatment

The fully automated Reliant® Packaged Water Treatment plant offers an economical means of removing high levels of turbidity, color, metals and waterborne disease organisms. Reliant® is a conventional system utilizing flocculation, sedimentation, and filtration. It is generally recommended where turbidites are regularly above 150 NTU.

Effective Technology

Our packaged water treatment plants work by chemically treating, flash mixing, and mechanically flocculating raw water to form a strong, settle able floc. Additionally, Roberts' sophisticated filtration technology is incorporated throughout, ensuring efficacy. Applications for the Reliant® include industrial, municipal and military.

Backwash Optimization

Backwash can be initiated manually or automatically on the basis of head loss, elapsed time or turbidity. Sludge removal from the settling section is activated independent of backwash without affecting normal plant operation.

High Quality

Roberts' prioritizes quality when manufacturing products. Reliant® is assembled at Roberts' American facilities. Reliant® was the first conta-clarifier of its time, ensuring Roberts' knows how to produce proficient operations.

Pretreatment Technology

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Spyder®

Sludge Withdrawal System

Spyder® provides perfectly balanced hydraulic evacuation of sedimentation basins. Its integrated web design allows the Spyder® to hug contoured floors and work around basin obstructions like columns or pipes. The only moving part is its valve; this greatly reduces maintenance.

Convenient Solution

Roberts has found a way around sludge basin obstructions with the Spyder®. The Spyder® has a configurable pipe systems are designed to fit perfectly into any obstructed spaces. It allows operators to evacuate sludge efficiently and uniformly regardless of the age or layout of their existing basins.

Maximizes Current Resources

The Spyder® saves water by eliminating the need of costly regular drain down and cleaning of sedimentation basins. The Spyder® saves time because it eliminates downtime needed to clean out old basins. Additionally, it provides modern system to maximize current space.

Microwedge Sludge Blocks®

Sludge Dewatering System

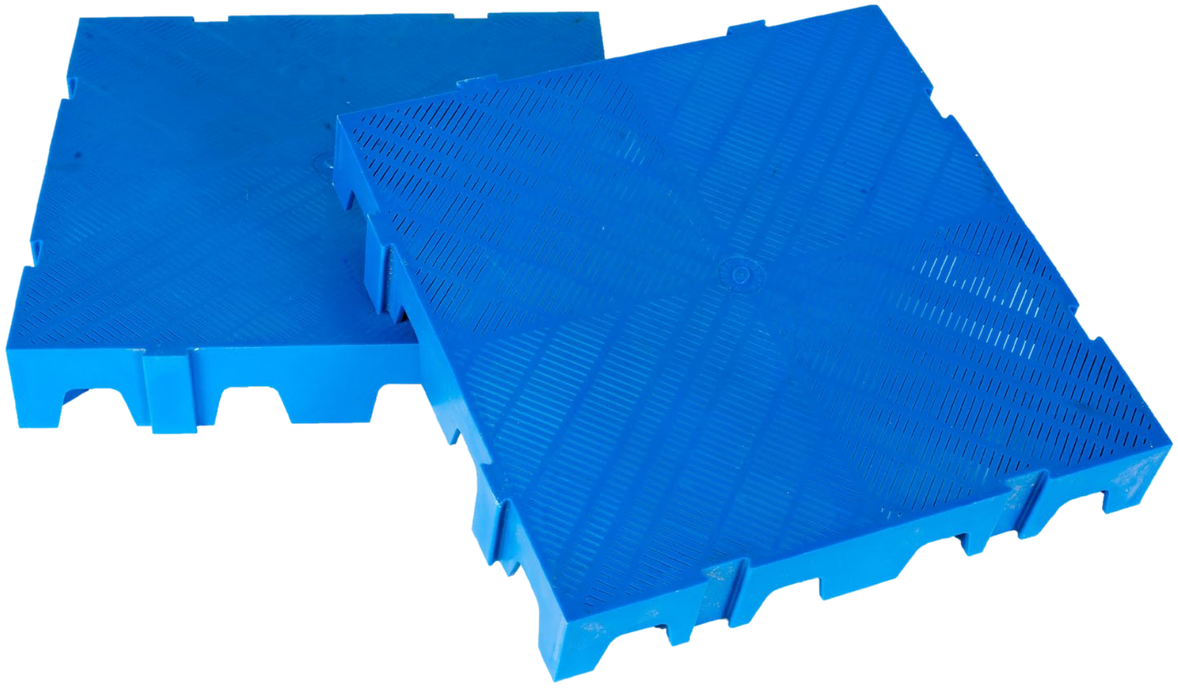
Roberts' Microwedge® Systems have been designed to effectively dewater both industrial and municipal sludges. Basins and bed sizes can be adjusted to fit any application, including upgrading an existing sand bed or converting lagoons. The system is flexible enough to handle industrial spikes or heavy surges from digestors and holding tanks.

Easy Installation

The interlocking design simplifies installation and individual unit replacement. The system is capable of continuous operation since there is no possibility of mechanical failure. It requires no energy and is nearly maintenance free.

Ease of Operation

Operation of the Microwedge Dewatering System is simple. Flood the bed with thickened sludge, wait for the sludge to dry, and remove the dry sludge cake with a front end loader. Following sludge removal, wash down the bed and repeat the cycle. The system can dewater anything from 1% aerobically digested sludge to 5% primary sludge to filter backwash waste, and it can achieve as high as 99% solids recovery.



Complete Design System

Complete system design is offered by Roberts Filter Group. Our skilled professionals will customize a system to meet your needs or our staff can recommend and provide all of the necessary components to meet your specified design criteria.

Design Considerations

A minimum of two beds is typical for most installations. Each bed consists of a concrete basin with an inlaid collection system. The dewatering blocks are placed in the basin and the perimeter is sealed with wood or stainless steel.

Pressure Filtration

Roberts Filter Group

Innovations for Generations

Horizontal Pressure Filter

Pressure Filtration

Roberts Filter has been designing and manufacturing horizontal pressure filters since the late 1800’s. We have over 2000 pressure filter installations, some of which have been in operation for over 100 years. The unique Roberts' multi-cell backwash system offers the economy of horizontal pressure filters, without the need for backwash pumps. The largest standard units have more that 500 square feet of filtering area, and can reliably supply plants that treat from 1 to 25 million gallons per day.

Popular Choice For Treatment of Municipal and Industrial Waters and Wastewater.

Horizontal Pressure Filters are especially well suited for the high volume flows required by large municipalities, industries, and power utilities. The unique Roberts' multi-cell backwash system offers the economy of horizontal pressure filters, without the need for backwash pumps.

Easily Installed and Maintained

Roberts' on-staff chemical engineers understand the variety of water treatment challenges that confront municipal and industrial users. They are experienced in applying our state of the art pressure filtration capabilities to solve the most challenging water treatment problems, at significant cost savings.

Low Initial and Operating Cost

Roberts Horizontal Pressure Filters offer low initial and operating costs than conventional systems and the package nature of these systems greatly simplifies the design and installation for the engineer and contractor.

Vertical Pressure Filter

Pressure Filtration

Roberts Filter Group specializes in large flow, large capacity systems. Standard vertical pressure filters up to 12 feet in diameter offer an especially cost effective and reliable solution for iron and manganese removal, turbidity reduction and process water filtration. Roberts' pressure filters can be configured for a variety of direct pumping treatment configurations. Consult our engineering staff for cost-saving solutions.

Popular Choice For Treatment of Municipal and Industrial Waters and Wastewater.

Vertical Pressure Filters are especially well suited for the high volume flows required by large municipalities, industries, and power utilities. The unique Roberts' multi-cell backwash system offers the economy of horizontal pressure filters, without the need for backwash pumps.

Easily Installed and Maintained

Roberts' on-staff chemical engineers understand the variety of water treatment challenges that confront municipal and industrial users. They are experienced in applying our state of the art pressure filtration capabilities to solve the most challenging water treatment problems, at significant cost savings.

Low Initial and Operating Cost

Roberts Vertical Pressure Filters offer low initial and operating costs than conventional systems and the package nature of these systems greatly simplifies the design and installation for the engineer and contractor.

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