

# Water Treatment Solutions



*We Bring Clarity To Water Treatment*



## Who we are and what we offer...

Milton Roy, LMI, and Albin Pump brands are part of the Ingersoll Rand business – a leading global provider of precision-engineered, process-critical and technologically advanced flow control systems.

Our global network of water and wastewater treatment professionals brings over 85 years of real-world application experience and an extensive equipment portfolio to get the results you need.

- Extensive portfolio: Pumps, mixers, controllers, polymer and dosing skids and systems
- Access to water treatment experts
- Performance, results, and value from a trusted partner

*“We bring clarity to water treatment”*



**Valued Reputation** – We work hard every day to earn the trust and confidence of our customers. We believe it's this reputation that sets us apart from the competition. Our goal is to manufacture world-class pumps, mixers, controllers, and accessories to respond to our customers' needs with a sense of urgency and mutual respect. Year after year, we continue to build more than just great products!

**Culture of Reliability** – For over 85 years, we continue to build superior products to meet our customers' toughest metering pump applications with the most reliable, competitive range of equipment on the market today. Our professional and experienced research and development team continues to design innovations for tomorrow.

**Our Global Network** – With strategically located global manufacturing sites and qualified channel partners to support you locally, we can support you and your application anytime and anywhere.

**Our Commitment to Quality** – Our family of brands delivers products of the highest quality to our customers. This commitment begins with a culture to continually improve our products and processes by implementing a quality management program based on best practices. Because of this commitment, our brands are the most reliable and well regarded on the market.

## APPLICATIONS

- Bleaching
- Defoamers
- Disinfection
- Corrosion Control
- Coagulation and Coagulant Aids
- Cyanide Removal
- De-chlorination
- Desalination
- Denitrification
- Dewatering Chemicals
- Dust Suppression
- Filter Aids
- Flocculation
- Flue Gas Desulfurization
- Fluoridation
- Hardness Control
- High Purity Water Treatment
- Inhibitors
- Iron and Manganese Removal
- Lime milk transfer and dosing
- Membrane Pretreatment & Cleaning Solutions
- Metal Recovery
- pH Control
- Resin Bed Regeneration
- Sludge and thickeners transfer
- Taste, Odor, and Color Control
- Water Conditioning and more...







## **Water and Wastewater Treatment**

Water is treated in numerous ways from removing solid material like sludge and sedimentation to dissolving suspended organic materials and disinfecting water by killing disease-causing micro-organisms. Each process involves a series of steps: pH control and various measures for taste and odor control. Each step requires an assortment of chemicals that are used in different combinations until the desired water standard has been achieved due to our pumping, dosing, and mixing solutions.



## **Commercial**

High-quality water is an essential part of the commercial process, and selecting the right equipment ensures consistent results that can save time, money, and extend the life of your equipment. Designed specifically for water treatment, our chemical metering pumps, controllers, and energy efficient mixers, will provide reliable and repeatable results you can depend on.



## **Utilities / Power Generation**

Proper chemical treatment assures maximum uptime of cooling towers and boilers, thus reducing operational costs and assuring the process is optimized. With a comprehensive selection of metering pumps, we can ensure that the metering pump and package match your facility specifications and requirements.



## **Desalination**

Maximizing the earth's water supply to meet increasing population demands by the removal of salt and minerals from seawater and disinfecting for human consumption.



## **General Industry**

If not treated effectively, the impurities in water can cause large scale damage in the industrial environment – damage that's not only expensive, but highly dangerous in these critical settings. Our equipment is designed to address problem areas such as scaling, corrosion, and the accumulation of microbiological activity that could diminish the quality and efficiency of the process. Water entering an industrial plant requires treatment prior to and after use to allow for reuse or release into the environment.



## **Institutional**

Hospitals, offices, and apartment buildings – The need for high-quality water requires customized solutions for high-volume output. Our comprehensive selection of efficiently designed metering pumps provides optimal water conditioning for utilities such as heating / cooling as well as personal consumption.



## **Chemical / Petrochemical**

We offer standard and customized metering pumps and packages with hydraulically-actuated or critical service diaphragms designed to deliver +/- 1% steady-state accuracy with 100:1 turndown ratios. Flexible multiplex configurations enable our pumps and systems to address a wide range of capabilities and pressures right for your process requirements. Our standard and configured mixers will also correctly complement our dosing systems.



## **Mining**

The robust design provides extended service life as it accurately doses and blends chemicals to aid in the extraction of precious metals and then treating the water before reuse or returning safely to the environment. Our state-of-the-art peristaltic pumps are used to transfer underflow thickeners and sludges containing solids.



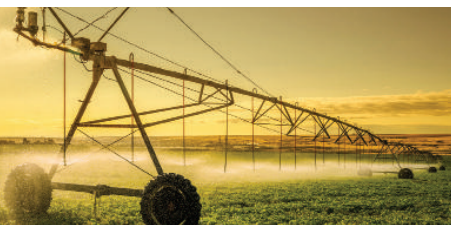
## **Oil & Gas**

From upstream to downstream and offshore to onshore, our metering pumps, packages, and mixers provide accurate chemical injection and precise agitation to meet your applications requirements, including produced water treatment.



## **Food & Beverage**

Treating water prior to use in production and then treating the wastewater before reusing or releasing, is a key part of the food and beverage production process.



## **Agricultural / Livestock**

Stringent safety standards require control of water treatment and conditioning applications to treat agriculture and livestock safely and efficiently. Choosing the right equipment can ensure accuracy, reliability, and desired results.



## **Pharma / Medical**

Treating large quantities of water prior to and during the manufacturing process is an essential part of this highly regulated industry. Once production is complete, the wastewater must be treated for impurities and recycled for reuse. Choosing the right equipment to efficiently manage chemical usage can save valuable time, money, and extend the life of the manufacturing equipment by ensuring high purity and safe process water.



## **Pulp & Paper**

Using equipment designed for accuracy and reliability is critical when treating water efficiency throughout the water dependent pulp and paper process. Before reusing or releasing wastewater, the equipment must also efficiently remove impurities and contaminants.





With the capability to pump a wide range of chemicals including acids, bases, corrosive or viscous liquids and slurries, our comprehensive selection of diaphragms and piston/plunger pumps provide the right pump for the application from aggressive environments, extreme pressures or variable flow ranges while providing consistent repeatable dosing.

**EQUIPMENT:** Motor-Driven, piston / plunger, double-diaphragm, multiplex, process, and hose pumps, package systems, streaming current detectors, valves and accessories

**Industries:**

- |                              |                              |
|------------------------------|------------------------------|
| Agriculture                  | Oil & Gas                    |
| Water / Wastewater Treatment | General Industry             |
| Chemical Processing          | Utilities / Power Generation |
| Commercial                   | Pulp & Paper                 |
| Institutional                | Pharma / Medical             |
| Food & Beverage              | Mining                       |



Flows: .0081 gph (.0307 l/h) to 2,510 gph (9,500 l/h)

Pressure: To 15,000 psi (1034 bar)

Turndown: 1,000:1 and 100:1 ratios



An extensive line of chemical metering pumps for water treatment, including both electronic and motor driven pumps, available for flow proportional applications with liquid handling configuration to handle slurries and high viscosity chemicals.

**EQUIPMENT:** Standard, specialized electronic, intelligent, and motor driven pumps, controllers, and accessories

**Industries:**

- |                              |                              |
|------------------------------|------------------------------|
| Agriculture                  | Oil & Gas                    |
| Water / Wastewater Treatment | General Industry             |
| Chemical Processing          | Utilities / Power Generation |
| Commercial                   | Pulp & Paper                 |
| Institutional                | Pharma / Medical             |
| Food & Beverage              | Mining                       |



Flows: .001 gph (6.1 l/h) to 300 gph (1,136 l/h)

Pressures: 25 psi (1.7 bar) to 300 psi (20.7 bar)

Turndown: Up to 1000:1





HELISEM and HM vertical and floating mixers provide efficient and cost effective fluid motion equipment for water treatment to filter out impurities and prepare the water for the next step in the treatment process. Applications such as coagulation, flocculation, denitrification, aeration, and dewatering/sludge removal. The legendary SABRE and the patented HXP impellers allow for increased efficiency and reduced energy consumption.

**MIXERS: Energy-efficient HELISEM® and HM Range vertical mixers**

**Industries:**

- |                              |                  |
|------------------------------|------------------|
| Water / Wastewater Treatment | Oil & Gas        |
| Chemical                     | Pharmaceuticals  |
| Formulation Industry         | General Industry |

Power: .18 kW/0.25 hp to 30 kW/40 hp  
 Volume: 10 L to 1,970 m<sup>3</sup>  
 Viscosity: Up to 1,000 cP  
 S.G./Density: Up to 1.3 for HELISEM range. No limit for HM range



Albin Pump designs peristaltic solutions to create better products and production processes for its customers. With decades of real-world industry experience, Albin Pump engineers peristaltic pumps with simplicity and reliability for its customers while helping them achieve the lowest total cost of ownership.

**Additional benefits include:**

- Easy and less frequent maintenance
- Longer prolonged hose life
- Self-priming with dry-run capacity
- The ability to pass solids
- A seal-less design protects against leaks and possible exposure to dangerous fluids

**PUMPS: Peristaltic Metering Pumps, Hose Pumps**

**Industries:**

- |                     |                       |
|---------------------|-----------------------|
| Agriculture         | Food & Beverage       |
| Mining/Quarries     | Pharmaceuticals       |
| Pulp & Paper        | Water & Wastewater    |
| Chemical Processing | Battery Manufacturing |
| Power Generation    | General Industry      |

Flows: 0 to 660 gpm (150 m<sup>3</sup>/h)  
 Pressures: To 220 psi (15 bar)  
 Turndown: Up to 10,000:1





### About Ingersoll Rand Inc.

Ingersoll Rand Inc. (NYSE:IR), driven by an entrepreneurial spirit and ownership mindset, is dedicated to helping make life better for our employees, customers and communities. Customers lean on us for our technology-driven excellence in mission-critical flow creation and industrial solutions across 40+ respected brands where our products and services excel in the most complex and harsh conditions. Our employees develop customers for life through their daily commitment to expertise, productivity and efficiency. For more information, visit [www.IRCO.com](http://www.IRCO.com).

