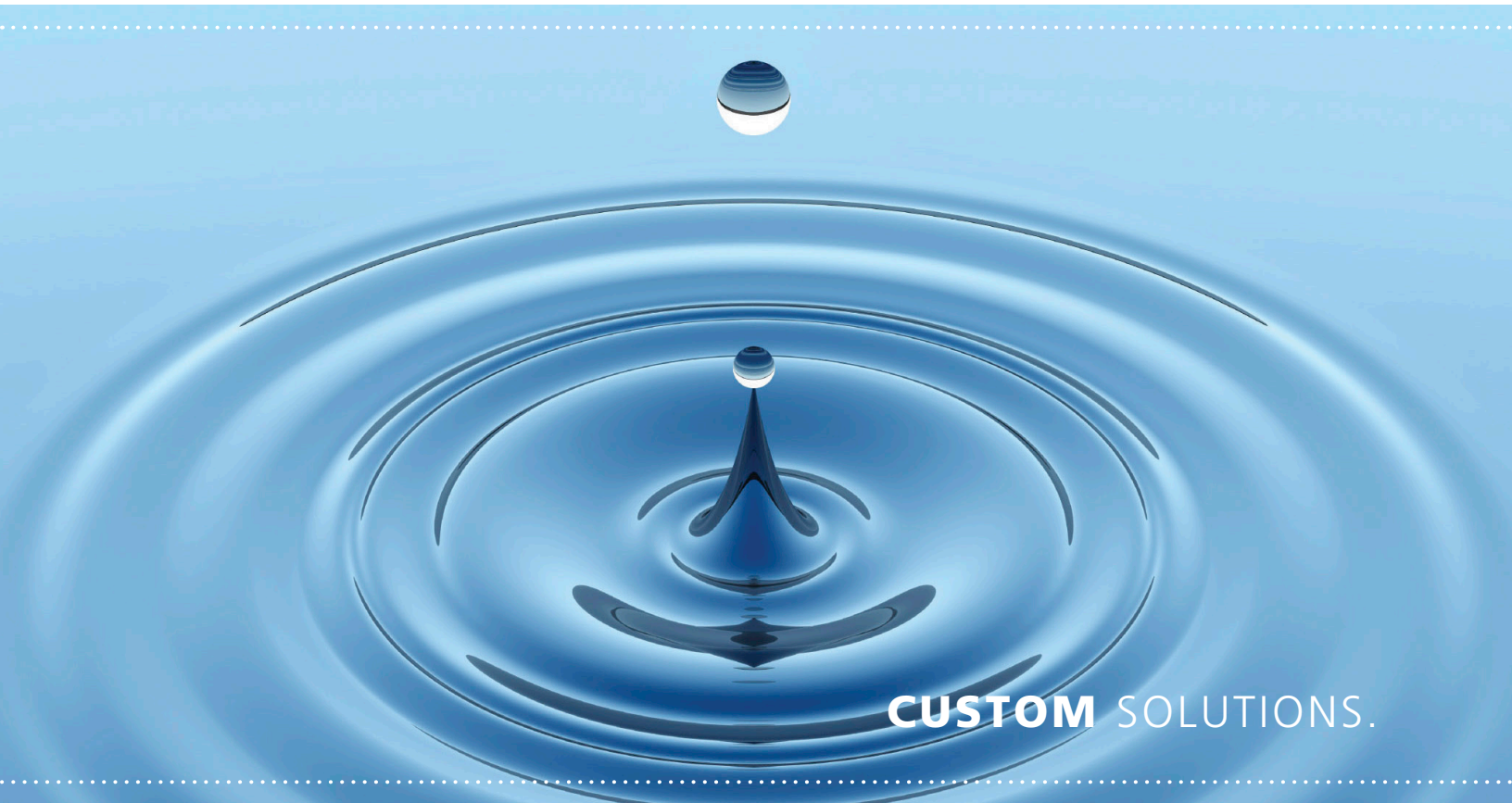




**The World's Premier**

# MODULAR INDUSTRIAL WATER TREATMENT SYSTEM



**CUSTOM SOLUTIONS.**

The Culligan Matrix Solutions® process identifies your individual business requirements and then creates a modular water treatment system that is customized to meet those needs. It's this customization process that allows Culligan to offer you the most complete water treatment solution in the industry.

# MATRIX SOLUTIONS

## Industrial Water Treatment System

**Like any great solution, the Culligan Matrix Solutions has a lot to offer:**

### Efficiency

- One of the fastest complete systems to market
- A flexible modular treatment solution to help meet your needs
- A cost-effective design, considering both capital and operating costs
- A field professional will train your staff on maintenance and operation
- One simple solution and one provider all for your water treatment requirements

### Reduced Operating Costs and an Increased ROI

- Reduction of TDS (total dissolved solids) will help extend the life of your equipment.
- More efficient equipment means reduced labor and maintenance costs.
- Reduce energy consumption, which could help you meet EPA guidelines.
- Protect the environment by reducing consumption of resources and chemicals, which can positively influence customer perceptions.
- Rigorous testing of each product helps promote quality and saves you time and money.

### Advanced Electronic Capabilities

- Alarm recognitions
- Historical operating data logging
- U.S. Standard and Metric readings
- Remote monitoring options
- Programmable Logic Controllers (PLCs)
- Telemetry options — a low-cost alternative to PLCs

**Each Culligan Matrix Solution module is customized to your specific industrial water needs.**



The tallest building in the world, the Burj Dubai, is one of several buildings in Dubai that has tapped Culligan to handle its Industrial water treatment needs.



The Culligan mobile water treatment unit provides comprehensive multi-level water purification, monitoring and control in a single solution. The modular system is designed for a wide variety of feed sources and can be operated in a rugged environment.



The above skid including pre-treatment, membrane de-gassing and distribution is deployed in a Steam Assisted Gravity Drainage (SAGD) facility in Western Canada.



The Culligan depth filters produce 640 gpm of treated water for a military application and are designed to meet local wastewater discharge standards for suspended solids.

## A CUSTOM SOLUTION. A COMPLETE SOLUTION.



### PRE-TREATMENT SOLUTIONS.

**The 1st Module** includes multi-media filtration, which reduces turbidity, odors, iron, manganese and heavy metals from water. Softening is also used to reduce water hardness, preventing scale and increasing the efficiency of process equipment.

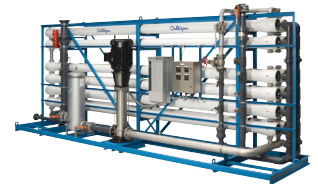
- Filtration • Chemical Treatment • Anti-Scalants • pH Adjustment
- Softening — with brine-reclaim and AquaSensor Technology



### MEMBRANE SOLUTIONS.

**The 2nd Module** features micro-, ultra- and nano-filtration, which reduce turbidity, suspended solids, and organic substances. This prepares water for effective disinfection and Reverse Osmosis. In addition, the second module features Reverse Osmosis membranes, which act as barriers to salts and organic substances including micro-contaminants, pesticides, pyrogens, and some viruses and bacteria. Reverse Osmosis can eliminate the need for chemical regenerants, further reducing costs.

- Micro-filtration • Ultra-filtration • Nano-filtration • Reverse Osmosis



### DEIONIZATION SOLUTIONS.

**The 3rd Module** features a charged ion exchange resin, which reduces mineral ions from water, given a wide variety of water quality. The result is polished water that is free of salts, eliminating the accumulation of scale.

- Portable Exchange Deionization (PEDI) • Continuous Electro Deionization (CEDI)



### STORAGE SOLUTIONS.

**The 4th Module** offers purified water storage. These storage solutions allow our customers to store water for peak demand conditions. Customers can size equipment based on average water usage, which helps reduce capital costs.

- 250 - 100,000 Gallons



### DISTRIBUTION SOLUTIONS.

**The 5th Module** offers delivery options, as well as further treatment of water, depending on your water quality requirements.

- Re-pressurization • Sanitization • Sub-Micron filters • Distribution Systems
- Re-circulation Systems • Disinfection Systems — UV, Ozone, or Chlorination



## We Ask the Right Questions So You Get the Right Solution.

Our consultative approach begins with a Culligan professional working with you to identify your specific water quality needs. By understanding these needs we can customize a system that gives you everything you require and nothing you don't – saving you money and helping you increase your ROI. At Culligan, we take pride in working closely with our customers so we can provide comprehensive industrial water treatment solutions.

## WE HAVE THE RIGHT SOLUTIONS FOR YOUR INDUSTRY'S NEEDS

### Manufacturing

Every manufacturer has specific water quality requirements based on the need for consistent production. With our expansive line of technologies including pre-treatment, membrane filtration, polishing, storage, and distribution, we can customize a solution to meet your process water needs while also offering technologies that will help minimize wastewater discharge and help you meet strict EPA regulations.

### Healthcare

Reverse Osmosis units, mixed bed deionization systems and continuous electro-deionization systems can be used to meet the high purity water quality requirements in the Healthcare industry. Additionally, water treatment can be used in sanitization processes to prevent the growth of bacteria, mold, algae and fungi in equipment

### Food & Beverage

Whether it's ingredient water, preparation water, process water, utility water or wastewater minimization, we have the diverse experience to understand your specific Food & Beverage water treatment needs.

### Energy & Power

A Culligan customized water treatment solution will allow you to increase the cycles of concentration and optimize the use of cooling tower make-up water resulting in significant cost savings. Furthermore, treating the make-up water with a Reverse Osmosis system will reduce dissolved solids and minimize scaling while various disinfection technologies, including biocides, can be used to prevent biological growth and promote continuous flow of water through the tower.

### Oil & Gas

With our water system discovery tool, we help our Oil & Gas customers meet high-pressure steam generator water quality requirements. A Reverse Osmosis system is used to produce a high purity steam generator influent, increasing thermal efficiency and reducing maintenance cost. Multi-media filters ahead of the RO system will increase RO life and produce significant cost savings. from design to installation, Culligan stands out by delivering advanced water treatment to small manufacturers valuing consistent production.

### APPLICATIONS

- Arsenic Removal
- Bio-pharmaceutical
- Boiler Treatment
- Chiller Water Conditioning
- Chip/PCB Manufacturing
- Cooling Towers
- Containerized Mobile Systems
- Desalination
- Drinking Water
- Genetic Research
- Gray Water Reclaim/ Recycle
- Heavy Metals Removal
- HVAC
- Nitrate Removal
- Oil Platform
- Painting/Plating
- Process Water
- Potable Water
- Ultra-pure Water
- Waste Minimization



Culligan of Chickasha (405)224-1839

## Place your industrial water treatment needs in the hands of a global leader



For over 75 years, Culligan has made better water. Our global network, comprised of 800+ dealers and international licensees in over 90 countries, is dedicated to addressing your water-related problems. As a worldwide leader in water treatment, our sales representatives and service technicians are familiar with the local water conditions in your area. Being global and local position us to deliver customized solutions to commercial and industrial water issues that affect your business and your bottom line.

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