You could give your people

Cullígan Water

The Use of Water Treatment in the Healthcare Industry



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Because hospitals, nursing homes, and doctor's offices provide direct patient care, they are subject to the strictest sanitation standards. Water treatment services are integral to meeting these standards, removing bacterial, viral, and inorganic contaminants from water to keep patients safe from infection. Water treatment also helps descale or soften water supply to protect expensive equipment and improves the taste of drinking water served to patients and staff alike.

Since healthcare facilities have such extensive and varied water treatment needs, medical clients must identify a supplier with comprehensive treatment capabilities. Reynolds Culligan's services include high-purity recirculating water systems, water softening, reverse osmosis, sediment filtration, UV disinfection, and deionization, allowing us to meet every water supply need.

Facilities Where Water Treatment for Healthcare Is Essential

Although their precise needs differ depending on their services and patient population, healthcare facilities rely on pure, high-quality water to sanitize equipment, process laboratory samples, and keep operations running smoothly.

Hospitals

Hospitals have some of the most complex water treatment needs of any healthcare facility due to their size and the scope of their offerings. Sterile water is a key commodity for hospitals, which use it to decontaminate materials from medical instruments to linens. Deionized water is especially important as it is the most common reagent used in laboratories, powering individual tests as well as specimen processing equipment and analyzer feed systems. Reliable on-site water treatment ensures that hospitals always have access to necessary supplies for these and similar applications. A comprehensive treatment system for a hospital thus includes a combination of water softening, reverseosmosis filtration, carbon filtration, UV sterilization, and deionization capabilities.



Clinics

Although clinics use less distilled water than large hospitals, they still need highpurity water to comply with health and safety regulations and to process biological specimens. Rather than relying on expensive shipment and storage solutions and incurring the risk of delays, large clinics can benefit from an investment in their own deionization systems, which provide continuous access to pure water.



Nursing Homes

As residential facilities, nursing homes use large quantities of water to clean linens, bathe patients, and supply kitchens, among other needs. Assisted living and long-term care facilities benefit from water softening and filtration to prolong the working life of laundry equipment, boilers, and pipes. These systems—scalable to facilities of any size—protect equipment, improve cleaning efficiency, and save money for facilities managing large sanitation jobs.



Applications of Water Treatment

Hospitals, care facilities, clinics, biomedical laboratories, and other healthcare environments draw on the same water treatment processes to enable a variety of critical processes. The most common healthcare applications include the following:

Water Quality and Sterilization

Medical devices present a serious risk of infection if not sterilized properly. This concern is especially pronounced for instruments that come into contact with broken skin or membranes. Contaminants introduced at these entrance points can lead to systemic infection, so it's critical that even the water used to wash them is completely sterile. Deionization and water purification helps healthcare facilities maintain a sterile environment in between patients and procedures.



Laboratory

The most common reagent in almost any lab is deionized water. "Deionized" is the operative word as even tiny amounts of contaminant can alter the result of a lab test, leading to inaccurate results and even misdiagnoses. Water treatment solutions allow lab technicians to easily access purified water, consisting only of hydrogen and oxygen. These treatment systems thus play a key role in maintaining consistent and accurate diagnostics at hospitals, standalone labs, and biomedical research facilities.



Water Softening

Water softening is the process of removing dissolved minerals and mineral salts from the water supply. These substances are responsible for scaling that builds up when relying on hard water. Water softening systems minimize the frequency with which maintenance is required and keep equipment running for longer. These benefits allow healthcare facilities to redirect resources toward patient care instead of unnecessary repairs and upgrades.



Deionization

For hospitals and labs requiring completely pure water supplies, deionization is a critical step, serving to capture any excess ions dissolved in an impure water solution. Deionization is typically combined with UV sanitation in healthcare settings to kill organic contaminants that deionization cannot remove.



Reverse Osmosis

Reverse osmosis is a filtration method that involves forcing water through a semipermeable membrane, which captures most impurities. Reverse osmosis is a common component of treatment systems for hospitals and residential care facilities, improving the quality and taste of water served to patients. In addition to treating drinking water, reverse



osmosis also purifies water used in laundries, HVAC systems, and boiler feeds to improve efficiency and reduce corrosion.

Ultraviolet (UV) Disinfection

UV disinfection targets organic contaminants with ultraviolet light, which efficiently kills bacteria and inactivates viruses. UV disinfection is extremely effective, eliminating virtually all microorganisms and viral contaminants without the use of harsh chemicals. Aside from being used in water treatment, the process is widely used to sterilize reusable equipment and surgical instruments thanks to its efficacy. UV disinfection also has the benefits of being low-cost, low-maintenance, and environmentally friendly, so it is easy to incorporate alongside other water treatment processes.



Choose Reynolds Culligan for Complete Water Solutions

The water treatment specialists at Reynolds Culligan offer comprehensive solutions to clients across the healthcare sector. Our water treatment solutions allow medical facilities to obtain purified water, highly purified water, and water for injection to support varied applications, and all three tiers comply with the medical industry's stringent hygiene requirements. Whatever your facility's size or specialty, our team will work with you to develop a comprehensive onsite water treatment process that meets your exact specifications. Reynolds Culligan is the only industrial water treatment company in the Mid-Atlantic that offers a single-source technology platform for water treatment clients. We continuously monitor system performance, and our clients harness the power of our analytics to ensure they are meeting quality and efficiency goals. These data help our partners in the medical industry determine exactly how to allocate resources for maximum efficiency.

To learn more about our services, or to discuss how we can adapt our flexible water treatment platform to meet your needs, **contact Reynolds Culligan** today.



About Us

Reynolds Culligan is the only industrial and commercial water treatment company in the Mid-Atlantic who provides a single-source, comprehensive water treatment technology platform for virtually any industry and application. This quality allows us to save your business valuable time and resources. With over 100 years of combined industry experience, competitive prices, and professional after-sale services, you can be confident that we provide exceptional products, service, and follow-up.



