



WATER TREATMENT

At Avlon Inc., we are driven by a singular vision – delivering smart, sustainable, and scalable engineering solutions that address the critical needs of water, energy, and environment. With a proven track record across the Philippines and Southeast Asia, we specialize in technologies that serve industries, communities, and the planet.

In water treatment, we offer advanced filtration, softening, disinfection, and reverse osmosis systems designed for industrial and institutional applications. These systems ensure consistent water quality while optimizing resource use and operating costs.



Who We Are

About Us

With over 35 years of expertise in wastewater treatment plant, air pollution control equipment's, industrial steam boiler including power plants and oil refinery design, engineering, construction and commissioning, AVLON has been a trusted industry leader since 1980. Renowned for excellence, we have played a key role in pioneering projects across India's oil and refinery sector, setting new standards in quality and innovation.

In 2015, AVLON expanded its operations to the Philippines, establishing itself as a premier integration contractor in the Energy and Environmental Sector. We operate with a strong infrastructure, including state-of-the-art heavy lifting and construction tools, a full-scale fabrication shop, a vast warehouse, and an advanced design and engineering facility.

With a commitment to excellence and innovation, AVLON continues to lead the way in shaping the future of the Energy and Environmental Sector in Philippines.

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Avlon's Advanced Multimedia Filtration Technology

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Multimedia Filtration is an advanced depth filtration process designed to remove fine suspended solids, turbidity, colloidal particles, and residual impurities from water and wastewater. Unlike conventional single-media sand filters, Multimedia Filters utilize multiple layers of filtration media with different densities and particle sizes. This layered configuration significantly enhances filtration efficiency and allows the filter to capture a broader range of particle sizes while maintaining longer filtration cycles and higher throughput capacity.

A typical Multimedia Filter consists of several filtration layers arranged according to density, usually including anthracite coal, silica sand, garnet, and graded gravel support media. The water enters the filter vessel under pressure and flows downward through these layers. The larger particles are captured in the upper anthracite layer, while progressively finer particles are removed in the lower layers of sand and garnet. This graded filtration structure promotes deep bed filtration, allowing contaminants to be trapped throughout the media depth rather than only at the surface. □ □

As filtration continues, suspended solids accumulate within the filter bed, gradually increasing resistance to flow. To maintain optimal performance, the system undergoes periodic backwashing, where water and sometimes air are introduced in the reverse direction to expand the media bed and flush out trapped particles. This cleaning process restores the filter's capacity and ensures consistent filtration performance over extended operational periods.



Avlon's Multimedia Filters are engineered with high-quality pressure vessels, precision media grading, optimized underdrain systems, and automated backwash controls to deliver reliable and efficient filtration performance. These filters are commonly used as pre-treatment units for Reverse Osmosis and Ultrafiltration systems, as well as polishing units for treated wastewater. With extensive experience in industrial and municipal water treatment systems, Avlon provides durable Multimedia Filtration solutions that ensure superior water clarity and support compliance with DENR water quality standards.

