



## 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.

Avlon's industrial pollution control technologies include wet scrubbers, bag filters, and electrostatic precipitators. These systems are built to reduce air emissions, protect worker health, and ensure compliance with environmental regulations.



## 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.

**Web: <https://avlon-php.com>**

**Email: [hello@avloninc.com](mailto:hello@avloninc.com)**



## Avlon's Advanced Wet Scrubbing Technology for Air Pollution Control

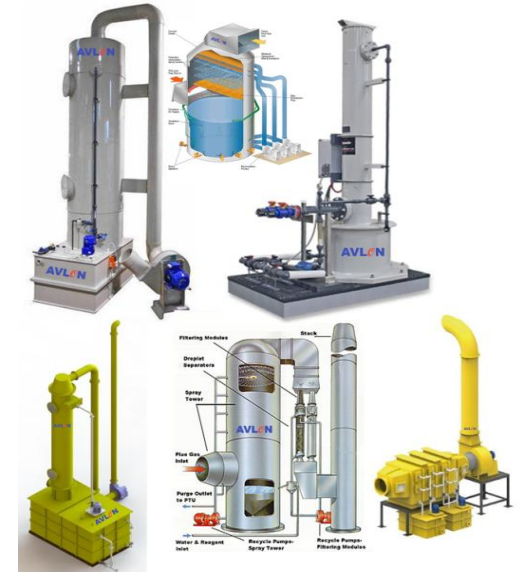
AVLON INC, UNIT 3B, KAVI  
BUILDING, E. RODRIGUEZ, JR. AVE,  
BAGUMBAYAN, QUEZON CITY, 1110  
METRO MANILA, PHILIPPINES



Wet scrubbers are highly effective air pollution control systems designed to remove particulate matter, acidic gases, toxic vapors, and chemical fumes from industrial exhaust streams. Many industrial processes release harmful gaseous pollutants such as sulfur dioxide (SO<sub>2</sub>), hydrogen chloride (HCl), ammonia (NH<sub>3</sub>), chlorine (Cl<sub>2</sub>), and other volatile chemical compounds that can pose serious environmental and health risks. Wet scrubbers provide a reliable method for capturing these contaminants by bringing the polluted gas stream into intimate contact with a liquid scrubbing medium that absorbs or neutralizes the pollutants before the air is discharged into the atmosphere.

The operation of a wet scrubber is based on the principle of gas-liquid mass transfer. Polluted air enters the scrubber tower and is directed through a contact zone where a scrubbing liquid—typically water or a chemically treated solution—is sprayed in the form of fine droplets through specially designed spray nozzles. As the gas passes through the spray zone, contaminants dissolve or react with the liquid droplets. Particulate matter becomes trapped in the liquid, while gaseous pollutants are absorbed or chemically neutralized depending on the composition of the scrubbing solution.

To improve removal efficiency, many wet scrubbers incorporate packed beds, venturi sections, or spray chambers that increase the contact surface area between the gas and liquid phases. After the gas-liquid interaction, the contaminated droplets are removed from the gas stream using mist eliminators or demisters, ensuring that only clean air exits through the exhaust stack. The collected scrubbing liquid is then directed to a sump where it can be recirculated, treated, or safely discharged depending on the system design and pollutant concentration.



Avlon's Wet Scrubber Systems are engineered with corrosion-resistant materials such as FRP or specialized alloys, high-efficiency spray nozzles, optimized gas distribution systems, and advanced mist elimination technology to deliver superior pollutant removal performance. Our scrubbers can be customized for various industrial applications and integrated with upstream air pollution control devices such as cyclone separators and bag filters. With extensive experience in environmental engineering solutions, Avlon provides robust wet scrubber systems that ensure reliable emission control while meeting the strict requirements of the Philippines Clean Air Act (RA 8749).

