



YUVAAN ENVIRO PROTECTION INC



“SAVE ENVIRONMENT SECURE THE FUTURE”

A Complete Solution for Water Treatment & Air Pollution

ABOUT US

Yuvaan Enviro Protection Inc is a Group of Technocrats who are involved in Designing, Manufacturing, Supply, Erection & Commissioning of Water/Wastewater Treatment & Air Pollution Control System.

Yuvaan Enviro is a flagship creation of **Rigidus** Peb Solutions Private Limited, started in the Year 2018, we have our own design and manufacturing unit, which allows us to provide high-quality products to customers at a low cost. We provide our clients with high-quality products at reasonable prices. The technologies and services that are currently available to meet our environmental needs and ensure a clean environment for future generations.

Our Service

Water/Wastewater Treatment :

1. Effluent Treatment Plant (ETP)
2. Sewage Treatment Plant (STP)
3. Common Effluent Treatment Plant (CETP)
4. Portable ETP/STP System
5. Ultra Filtration System
6. Swimming Pool Filtration System
7. Industrial RO Plant
8. Demineralization Plant
9. Water Softener Plant

Air Pollution Control :

1. Wet Scrubber
2. Bag Filter
3. Industrial Chimney
4. Cyclone

Applications

- Manufacturing Industries
- Hospitals
- School & Colleges
- Municipalities
- Oil and Gas
- Housing Estates
- Swimming Pool
- Hotels and Resorts

1 WATER/WASTE WATER TREATMENT

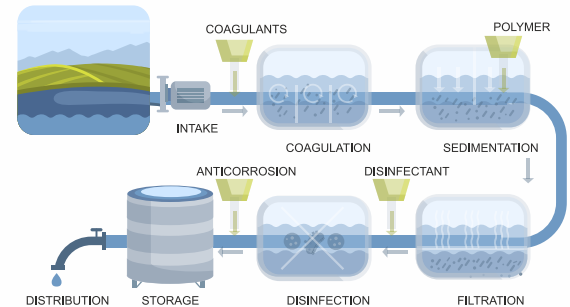
Effluent Treatment Plant (ETP)

Keeping in view of the fresh water demand for drinking as well as for industries, the scarcity of fresh water is the most burning problem for today's life.

We provide complete solution of work including Design, Drawing, Engineering Supervision, Renovation, Supply, Erection, Testing & Commissioning including Mechanical, Electrical, Plumbing and Instrumentation items of work of ETP's on Turnkey Basis.

- Design and Engineering for New ETP for various industries/hospitals.
- Feasibility Studies for New ETP Set ups and Modifications/ Renovation/ Expansion of existing ETP's.
- Designs of Zero Liquid Discharge Systems.

WATER PURIFICATION

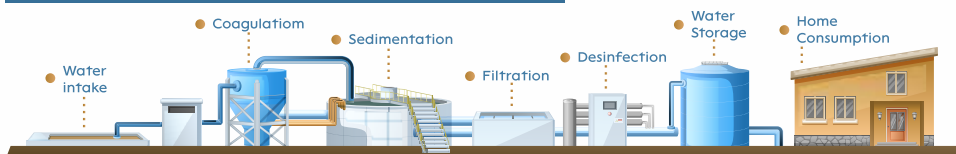


APPLICATION AREAS:

Tanneries/ Leather industry, Slaughter House, Textile Industry, Paint industry, Distillery industry, electroplating industry, Dairy industry, Sugar industry, Paper & Pulp industry, Oil refineries, Glass industry, pharmaceutical industry, Food Processing industry, Cement industry, Chlor Alkali industry, Fertilizer industry.



WATER TREATMENT PROCESSES



Sewage Treatment Plant (STP)

Sewage Treatment is the need of the day as it is the simplest & convenient way of treatment with recycling and reuse of precious water. The sewage must be treated and disposed of to avoid water and soil pollution matter. Due to large quantity of sewage produced, the age-old system of septic tanks and soak pits is not effective. The overflow from these facilities forms lots of dirty water that invites mosquito breeding.

We provide complete solution along with Design, Drawing, Engineering Supervision, Construction Fabrication, Supply, Erection, Testing & Commissioning including Mechanical, Piping, Electrical & Instrumentation work of the STP plants on Turnkey basis.

- Technologies offered for STP's are SBR, FAB, MBBR, MBR etc. or any of other technology as per client requirement/ site conditions.
- Design of recycling and reuse concepts by providing tertiary polishing treatment to treat sewage water for plant reuse applications of gardening/ flushing/ reuse in cooling tower makeup/ floor washing etc.

APPLICATION AREAS:

Used in community, real estate, industries, hospitals & township projects.



Common Effluent Treatment Plant (CETP)

Keeping in view of very high cost for installation of STP & ETP separately for any industry, we offer Common Effluent Treatment Plant (CETP) as a single for treatment of both sewage & effluent. CETP reduces the project cost as well as the area required for plant establishment.



Portable ETP/STP System

Tanneries/ Leather industry, Slaughter House, Textile Industry, Paint industry, Distillery industry, electroplating industry, Dairy industry, Sugar industry, Paper & Pulp industry, Oil refineries, Glass industry, pharmaceutical industry, Food Processing industry, Cement industry, Chlor Alkali industry, Fertilizer industry.



ULTRA FILTRATION SYSTEM



Ultra filtration Plant is used in both pretreatment and post-treatment of water. We supply and install custom-made ultrafiltration Water systems (UF Systems) upto 10m³/ Hr, units can be semi or fully-programmable and PLC controlled. These are extensively used in industrial water and wastewater treatment applications. These units are next-generation equipment, designed to minimize investment and maximize performance meeting stringent environmental protection requirements.

Swimming Pool Filtration System

A swimming pool filtration system is a mechanism that removes dirt, debris, and other contaminants from pool water, ensuring it remains clean and safe for swimming. The system typically involves a pump, filter, and return jets, working together to circulate and purify the water.



Industrial RO Plant

Plants RO is used to purify water both for Domestic and Industrial uses. RO water treatment is a physical separation process in which dissolved particles are filtered from contaminated water. Systems involve various technologies depending upon client requirement and wastewater, such as Reverse Osmosis (RO), Ultra Violate (UV), Ultra Filtration (UF) systems.



Demineralization Plant

Demineralisation (DM) is the process of removing mineral salts from water by using the ion exchange process. With most natural water sources, it is possible to use Demineralisation and produce water of a higher quality than conventional distillation.

A hard water softener uses sodium chloride, also known as salt, to treat hard water. Hard water contains calcium,

magnesium, manganese, and iron. A water softener is a relatively simple appliance that is stocked with salt. In the water softening process, the water supply passes through the water softener over resin beds, rows of resin beads perform an ion exchange. The resin beads chemically attract the unwanted 'hard' mineral ions and exchange them with sodium ions.

2 AIR POLLUTION CONTROL

Wet Scrubber

A wet scrubber, also known as a wet scrubber system or simply a scrubber, is an air pollution control device used to remove pollutants, such as particulates, gases, and chemical compounds, from industrial exhaust gases or emissions. It does this through a process known as "scrubbing," which involves the interaction of the contaminated gas stream with a liquid (usually water or a chemical solution) to capture and remove the pollutants. Wet scrubbers are commonly used in various industries to improve air quality and reduce emissions.



Bag Filter

A bag filter, also known as a fabric filter or baghouse, is an air pollution control device designed to remove particulate matter (dust, particulates, and solid particles) from industrial gas streams. Bag filters are widely used in a variety of industries to improve air quality and ensure compliance with environmental regulations. They are particularly effective for capturing fine particles and have a straightforward and reliable design. Here's a description of the key components and operation of a bag filter:

Industrial Chimney

An industrial chimney, also known as a smoke stack or flue-gas stack, is a tall, vertical structure designed to exhaust waste gases, particularly those produced during fuel combustion in industrial settings, away from the ground and into the atmosphere. These structures are essential for dispersing harmful emissions and ensuring they meet acceptable concentration levels at ground level, as dictated by pollution control regulations.



Cyclone

A cyclone air pollution control device, or cyclone separator, is a mechanical system that removes particulate matter from a gas stream using centrifugal force. It's a type of dry scrubber and is particularly effective at removing larger particles.

3 OTHER PRODUCTS & SERVICES

1. Centrifuge Machine

Industrial centrifuge machines are used in water treatment plants to separate solids from liquids, effectively clarifying water by leveraging centrifugal force. These machines are particularly useful for removing suspended solids, sludge, and even some types of oils from wastewater, making the water suitable for recycling or safe discharge. It is a continuous process.



2. Filter Press

An industrial filter press is a type of filtration equipment used in water treatment plants to separate solids from liquids, resulting in cleaner water and concentrated solids (sludge). These systems are crucial in various industrial applications for wastewater treatment, process water purification, and sludge management. it is a batch system process



3. Oil Skimmer

An oil skimmer in a water treatment plant is a device that removes floating oil, grease, and fats from the water's surface. This process is crucial for preventing clogs in pipes and filters, and it enhances the overall efficiency of the treatment process. Oil skimmers work by using various methods to collect the oil, such as belts, tubes, or disks, which then scrape off the collected oil.

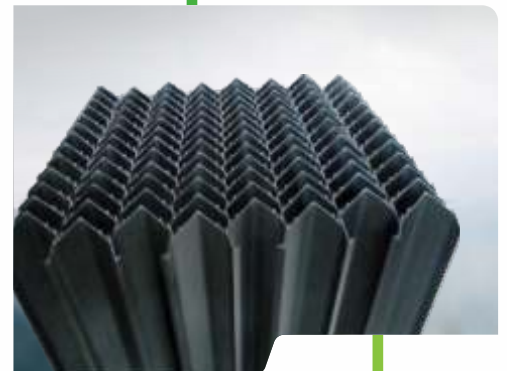
4. Carbon/Dual Media Filter

Activated Carbon Filters (ACF) and Dual Media Filters (DMF) are both used in water treatment plants for different purposes. ACF primarily removes impurities like chlorine, organic matter, odor, and color through adsorption. DMF, typically containing anthracite and sand, focuses on removing turbidity and suspended solids. Essentially, ACF targets dissolved impurities while DMF handles particulate matter



5. Tube Media

A tube settler, also known as a lamella clarifier, is a component used in water and wastewater treatment plants to enhance the settling process of solids. It consists of bundles of inclined tubes or plates that create a large surface area for particles to settle on, allowing for more efficient separation of solids from the liquid. This improves the overall performance of sedimentation tanks



6. MBBR Media

MBBR (Moving Bed Biofilm Reactor) media, typically made of plastic, is a key component in Sewage Treatment Plants (STPs). These media provide a large surface area for microorganisms to attach and form biofilms, which are essential for breaking down pollutants in wastewater. The MBBR process enhances wastewater treatment efficiency by maximizing the growth of beneficial bacteria within a relatively small reactor volume.



7. Air Blower

Air blowers are crucial components in wastewater treatment plants, playing a vital role in the biological treatment process. They introduce air into the wastewater, providing the oxygen needed for aerobic bacteria to break down organic pollutants. This aeration process is essential for maintaining healthy microbial populations and ensuring efficient wastewater purification

8. Induced Draft Fan (ID Fan)

An Induced Draft (ID) fan plays a crucial role in air pollution control by extracting flue gases and particulate matter from industrial processes, particularly in systems like bag filter/ Bag house, Wet scrubber, Cyclone separators, boilers and furnaces etc. By creating a negative pressure, ID fans ensure efficient exhaust and help minimize the release of harmful pollutants into the atmosphere.



9. Bags & Cages

Filter bags and cages are crucial components in industrial air pollution control systems, particularly in baghouses, to capture and remove particulate matter from exhaust gases. They prevent pollutants from escaping into the atmosphere, improving air quality and protecting worker health and the environment.



10. Solenoid Valves

Solenoid valves can play a crucial role in reducing air pollution by controlling the flow of air and gases in various applications, particularly in industrial settings and vehicle emissions control systems. They are used to regulate airflow in dust collectors, manage fuel evaporation in vehicles, and control the release of gases in industrial processes, all contributing to cleaner air.



OUR CLIENTS



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