



HYALINE ENVIRO ENGINEERS PVT LTD

Pioneers In Water Treatment

info@hyalineenviro.com | www.hyalineenviro.com



AN ISO 9001 : 2008 Certified Company

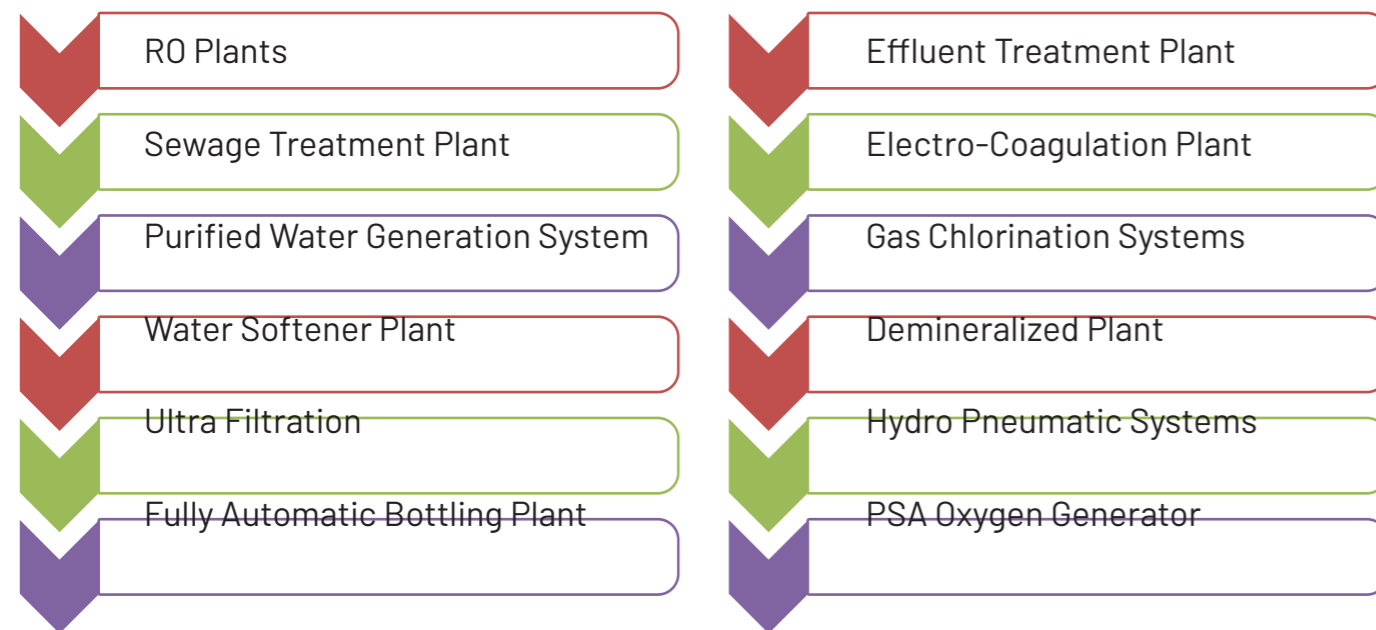
About Us

Water has been contaminated due to industrialization and various aspects and hence all living creatures are unable to access pure water in the modern world. Due to improper or poorly managed sewage system in India 70% of the accessible ground water is getting contaminated. Realizing the importance of water for the future sustainability, Hyaline Enviro has committed in this space with dedicated professionals.

Hyaline Enviro Engineers Pvt. Ltd, ISO 9001: 2008 an and certified company. The company is specialized and developed various technologies to provide solutions for water & waste water treatment. Our strong experience, specialized advanced proven technologies and services, allows our customers, to meet the highest standards of ecological responsibility in their business. Hyaline Enviro is the gateway to solution for the Water and waste water treatment. Hyaline Enviro assures total responsibility for solving problems by treating each customer's project with individual responsibility and ensures personalized service.

Hyaline Enviro has expertise in designs, Unique Solutions, organize and successfully implement the projects, irrespective of the size complexity and ensures project completion, as per schedule to meet customer satisfaction. Hyaline Enviro has got PMG (Project Management Group) to Complete the projects in time.

Hyaline Enviro Offers :



Our Projctcs

REVERSE OSMOSIS

Reverse osmosis (RO) is the most efficient method of removing 90% to 99% of all contaminants. The pore structure of RO membranes is much tighter than UF membranes. RO membranes are capable of rejecting practically all particles, bacteria and organics >300 Daltons molecular weight. Natural osmosis occurs when solutions with two different concentrations are separated by a semipermeable membrane. Hyaline Enviro Design, the plants based on the raw water parameters and the standard models available from 200Lph onwards. As per the customer requirement, application and capacity, our systems exceed the standards with outstanding performance and hence we are the most preferred vendor in this filed. We are specialized in fully automated RO plants.



ELECTRO COAGULATION (Hyaline e-STP)



Electrocoagulation (EC) is a water treatment process whereby an electric field is applied across plates to remove various contaminants from water. An Electrocoagulation water treatment system represents a major advancement in wastewater treatment. It is revolutionary Electrical-Machanicla technology for effectively treating complex waste streams economically on-site. Current is applied to the electrolytic cell plates causing trace

amounts of the plate material to be dissolved into the water. The action is similar to adding separation chemicals (polymers) to a chemical treatment system but much less expensive.

COAGULATION: The electrical current and trace dissolved metals from the electrolytic cell plates,

cause suspended matter to come together, forming larger particles.

ADVANTAGES

- Non-selective process on a wide variety of contaminants
- Ideal Pretreatment for downstream polishing technologies, e.g. R.O.
- Sludge production can be 30 - 70% Less Voluminous compared to chemical processes

APPLICATIONS

- Sewage water treatment (COD removal)
- Fats, oils and grease (FOG) removal
- Food including dairy, meat, fish, vegetable and fruit processing
- Food oil, industrial oil in waters
- Silica Removal
- Sludge dewatering
- Textile and Dye
- Coal washing
- Chromium removal
- Calcium removal

UV SYSTEM

Water Treatment using UV system does not involve any chemicals. It is Physical Treatment, so it does not alter the water chemistry. UV adds nothing to the water such as undesirable colour, odour, taste or flavour. UV or Ultra Violet rays are in the electromagnetic spectrum and between visible light and X-rays. In order to kill microorganism, the UV rays must actually strike cell. UV rays penetrate the outer cell membrane, passes through the cell body and disrupt its DNA preventing reproduction. Hyaline Enviro's "UV systems" are customized for customer to customer. As the micro organisms' nature changes with the atmospheric conditions, Our team study the nature of the water and Design the Systems ranging from 50Lph to 2,00,000 Lph.



HYALINE ENVIRO

IS PIONEER IN DESIGN,
ENGINEERING, ERECTION,
COMMISSIONING OF
WATER & WASTE WATER
TREATMENT PLANTS IN PAN INDIA

PURIFIED WATER GENERATION AND DISTRIBUTION

Our high purity water treatment solutions are available in various models with flow rates ranging from 200 LPH (0.2m³/hr) to 20,000 LPH (20m³/hr) and with water and energy efficiencies through recycling. They offer full or partially heat sanitizing and incorporate softening, reverse osmosis and continuous electrode-ionization.



ULTRA FILTRATION (UF)



Ultra Filtration acts as a Pre-Treatment before Reverse Osmosis, which increases RO availability factor Ultra filtration is a separation process using membranes with pore sizes in the range of 0.1 to 0.001 micron. Typically, ultra filtration removes high molecular weight substances, colloidal materials, and organic and inorganic polymeric molecules, but Low molecular-weight organics and ions such as sodium, calcium, magnesium chloride, and sulphate are not removed. Due to the

negligible differential osmotic pressure across the membrane surface, only high-molecular weight species are removed. Hyaline Enviro's Ultrafiltration systems are extremely effective for treating heavy surface water. Ultra-filtration treated water can be sent for reverse osmosis and recycled or further taken for portable application. Hyaline Enviro Experts in Designing Engineering, Erection and commissioning of automated ultra filtration plants; Our Ultra Filtration systems are free from clogging and hence work effectively.

GAS CHLORINATORS

Hyaline Enviro is pioneers in Designing & Engineering of Chlorination Systems and Accessories, used in Drinking Water, Cooling Water, Waste Water Treatment and other specialized applications. Hyaline Enviro has a state-of-art knowledge and highly experienced professional team. We Design, Engineering, Erection & Commissioning of Chlorination Systems & Accessories on Turn - key Basis. Gas Chlorinators are used in Fertilizer plants, Oil Refineries, Petrochemical Industries, Thermal Power Plants, Steel manufacturing plants, Pharma Industries, Pesticide manufacturing plants, Food & Beverage Industries, Paper and Pulp Industries, Sugar Plants for combating slime and algae.



WATER SOFTENERS



Hyaline Enviro has extensive experience in developing Water Softeners to remove scaling. Water Softeners are specific ion exchange equipment, which is used to soften the water, by removing the minerals that cause the water to be hard. Minerals like calcium and magnesium present in the water in their carbonates and bicarbonates form and makes the water hard which creates scaling when it is used in industrial as well as in other domestic applications. Water softening plant uses Ion Exchange process which relies on the

replacement of the Calcium and Magnesium ions present in the water by an equivalent number of Sodium ions. This eliminates the unwanted characteristics of hard water because the sodium salts never forms scale in any of the machinery parts. The resins get charged by sodium chloride solution (common salt) which is the cost effective and easiest maintenance process. Hyaline Enviro offers customized water softening systems in various sizes for Residential, Restaurants, Commercial and Various industrial applications.

NANO FILTRATION



Nano Filtration is a pressure driven separation process. Selective separation layer is formed by organic semi permeable membrane for the Nano Filtration process. The "Pressure" difference between the 'Feed' and 'Filtrate' at the separation side of membrane is the key Parameter for the Nano Filtration. Nanofiltration (NF) is a rapidly advancing membrane separation technique for water and wastewater treatment. NF can be defined as a pressure driven process wherein the

pore size of the membrane (0.5 - 1 nm) as well as the trans-membrane pressure (5 - 21 atm) lies between reverse osmosis and ultra filtration. NF membranes allow partial permeation of monovalent salts such as sodium chloride while rejecting bivalent salts and hardness to a greater extent from aqueous solutions. NF can remove lower TDS and hardness reduce colour and odour, and remove heavy metal ions from ground water. Nan filtration is used as an independent system to treat water, or as a pretreatment to reverse osmosis, thereby, reducing the load on RO.

PRE TREATMENT PLANT (WTP)

We do complete Pre treatment plant for various industries such as Pharma, Chemical, Textile, Power, Sugar, Cement, Paper & Pulp, and Food; In pre-treatment, River water is pumped to the Water Purification Plant and distributed from the Plant through several large pipelines. River water contains large amounts of suspended solids. Treatment under go various stages of processing as followed,



STAGE 1 - Coagulation | Stage 2 -

Flocculation | Stage 3 - Sedimentation | Stage 4 - Disinfection

Stage 5 - pH Adjustment | Stage 6 - Filtration :

OZONATORS

Ozone is the strongest and most effective natural algaecide, bactericide, disinfectant, fungicide, germicide, and sanitizer and anti viral agent. Activated oxygen not only destroys all pathogenic disease causing microbes, it also destroys fungal pathogens, cysts, parasites, protozoa and some yeasts too. Ozone is a triatomic molecule (O₃) consisting of three oxygen atoms. It is an allotrope of oxygen that is much less stable than the diatomic (O₂, regular oxygen). It is a gas made from air and high voltage. The injection of ozone into water produces tiny ozone bubbles, which saturate the water.



Hyaline Enviro Ozonator's Advantageous

No filters to change

Automatic timer from 5 min. to 60 min.

Continuous operation

Convenient wall mounting holes

SEWAGE TREATMENT PLANT

Government has been emphasizing the recycle of waste water and sewage from residential colonies & apartments, Hotels, Restaurants, Hospitals, IT parks and strictly targeted these communities to follow pollution norms. Hyaline Enviro has developed innovative, economical and easy to operate STP Systems. Sewage Treatment Plant (STP) has become statutory



requirement as per the State Pollution Control Boards. As land is scarce, we have identified that very few institutions & companies could afford large size treatment plants. Hyaline Enviro Engineers have developed affordable STP's as per the customer need. These are portable package sewage Treatment plants and FRP coated MS fabricated. These can be easily transported to site, which thus reduce the unnecessary civil cost, improves workmanship, speedy work and excellent treated water quality. As per the clients need and suitability we offer latest technologies like MBBR, FAB, SAFF, SBR and MBR. It works on the principle of Aerobic Treatment, with the help of aerobic bacteria. This is most conventional and proven method throughout the world.

EFFLUENT TREATMENT PLANT



Industrialization has been increasing the ground water contamination. Environmentalists' concerns and people agitation made many companies which are releasing waste liquid hazardous has to follow states & central government's pollution rules strictly. Hyaline Enviro Engineers' team has specialization to analyze the complex effluent samples for different effluent Parameters as per the nature and compositions to carry out the treat-

ability studies by using different methods, checking techno commercial Feasibility and then to prepare various designs for treatment processes accordingly to suit the purpose and need of the customer. Our ETP systems are compact, customized, portable, requires less space and energy efficient. The principle of operation ETP, is Physico Chemical treatment followed by Polishing Treatments like -Sand Filtration, Activated Charcoal treatment (Adsorption), Ozonisation (Chemical Oxidation), Ultra Filtration (UF), Reverse Osmosis (RO) and then followed by evaporation based on requirement. We Design, Engineering, Erection and Commissioning of Customized Effluent Treatment Plants (ETP) on Turnkey basis We also undertake "up-gradation", "modifications" in the existing ETP systems to achieve desired limiting standards laid down by the Pollution Control Board (PCB).

OPERATION & MAINTENANCE (AMC, O&M)

Hyaline Enviro has abundant expertise and technologies in water and waste water management; we provide **O & M** (Operation and maintenance) services for water treatment facilities that contribute to the safe operation and more efficient and economical maintenance. We take overall responsibility for all scheduled and emergency maintenance of Gas chlorinators, DM Plants, Sewage Treatment Plants, Effluent Treatment Plants, Water Treatment Plants, Electro Coagulation systems, Water Softeners, & Ozonators. We have a good team of qualified professionals with diversified engineering backgrounds, we possess the best expertise to deliver optimal solutions as per the project requirements and add value to the customer.



RESEARCH & DEVELOPMENT

Leveraging on our separate R&D wing, we offer a wide range Water Treatment Products to our clients. We have a team of researchers who conduct regular research on the latest market developments such as technology, production materials, manufacturing technique, and testing measures. Their exhaustive research enables us improve our current range as well as develop new ones. Our research scholar's offers implications that are best in favour of the organization. Moreover, owing to these research and development activities, we have significantly reduced the production time and produce quality Water Filters.



CBS (Commercial Building Services)

We Offer Hydro Pneumatic Pumps in Groundfos Pumps, CNP Pumps, AO Smith Heat Pumps, Geysers for Commercial & Residential Projects. We also take pumps services, Grundfos & CNP Pumps. We also Carry Retro Fitting works includes piping & Automation & Integration.



Hyaline Enviro Offers Utilities & Water Treatment Solutions to the Following Industries.

Iron & Steel
Oil & Gas Industries
Power Generation
Refineries & Petrochemicals
Cement

Textile
Fertilizer & Chemicals

Pharmaceuticals

Food Processing
Sugar

Beverages & Distillery
Hotels & commercial Complexes
Automobile

Pharmaceutical
Semiconductor & Electronics

Hotels & Communities

CHEMICALS (Water & Waste Water, Boilers & Cooling Towers)



- | | |
|-------------------------|----------------------------|
| Antiscalant | Cation Resins |
| Alum | Anion Resins |
| Polyelectrolyte | Hyper active Resins |
| Poly Aluminium Chloride | Caustic Flakes |
| Chlorine Granules | Citric Acid |
| STP Culture | Crystal Salt |
| Hydrated Lime | Cleaning Chemicals |
| Boiler Chemicals | EDI (Electrical Deionizer) |
| | |

We deal in all kinds of boiler chemicals, Ionexchange, actul, Thermax, purolite, lanxux Resins, STP culture which develop bacteria, Anti-scalant chemicals for package drinking water plants crystal salt (NaCl) and all water treatment chemicals such as Cleaning chemicals, Alum, coagulants, polyelectrolyte, Hydrated lime, Chlorine granules of 95% concentration, sodium hypochlorine solution of 1% concentration, HCL, citric acid, caustic soda etc.

Spare & Accessories



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|-------------------------------|--------------------------------|
| Cartridge Filters | SS Tanks |
| Brine solution Tanks | RO Kits |
| HDPE Tanks | Bio Pac Media For STP & ETP |
| Dosing Tanks | Hardness Test Kit |
| FRP Vessels | Residual Chlorine Test Kit |
| Moulded Rubber Gaskets | Activated Carbon |
| | Double decker strainer buttons |
| Rubber lined Vessels | Hydro Pneumatic Systems |
| RO Membranes | LED Watchers |
| UF Membranes | Yoke (or) Angle valves |
| Nano Membranes | |
| Dosing Pumps | |
| MS Tanks | |
| filter media(sand & pebbles) | |
| Air duct ozone generators | |
| Diaphragm valves | |
| Lamella Clarifier | |
| | |

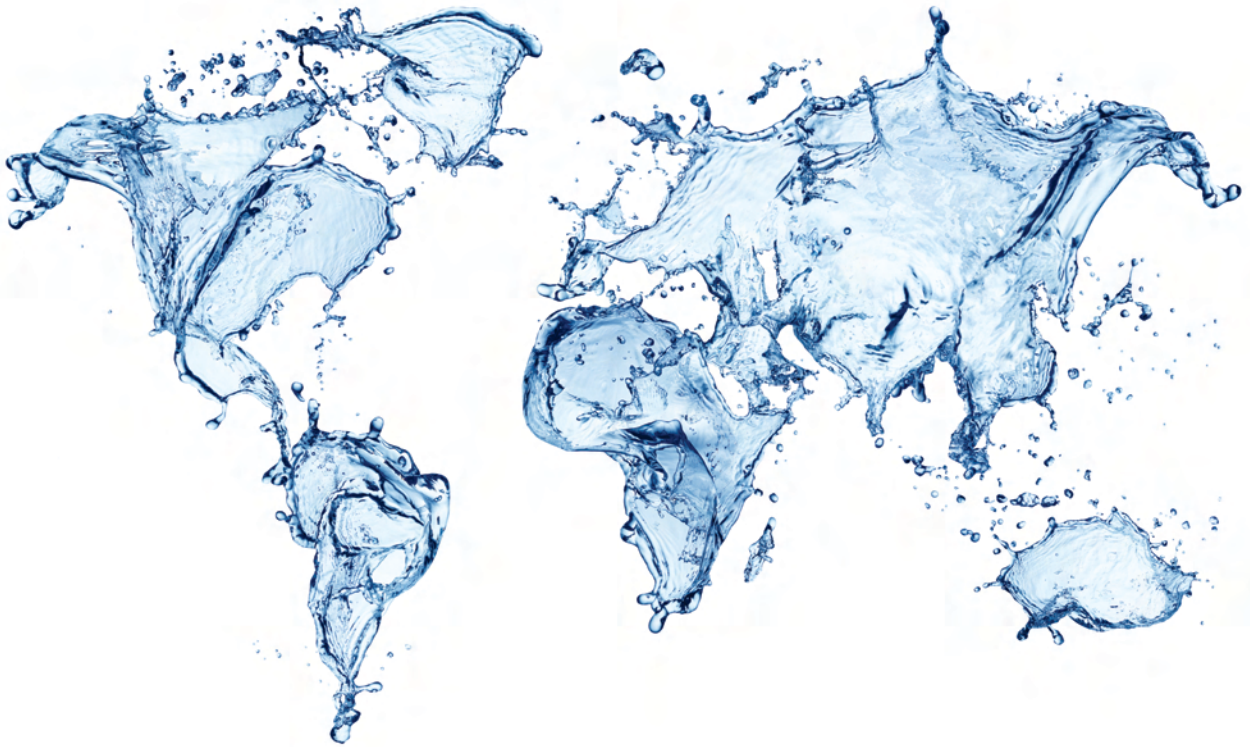
OUR CLIENTELE



OUR CLIENTELE



& Many More.....



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Corporate Office : #61, Jay Ram Bhavan, Green Park Avenue, Petbasheerbad,
Besides Chennai Shopping Mall, Suchitra Circle, Hyderabad – 500067, Telangana, India.

Mob : +91 93907 01234 | 99663 99216 | 93476 05167. **Tel :** +91 40 2723 0374 / 2723 0333 / 4614 7805 .

Email : info@hyalineenviro.com | sales@hyalineenviro.com

www.hyalineenviro.com

BRANCHES : VISHAKAPATNAM | BANGALORE

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