

# IONMAX ENGINEERS

(A UNIT OF SUPERFLOW COOLING TOWERS PVT LTD)

ISO CERTIFIED 9001:2008

(A Complete Solution of Water Technology)

## water solutions for a green planet



### CONTACT

OFFICE: GROUND FLOOR, AIR FORCE ROAD, NEAR  
BHARAT GAS GODOWN, VILLAGE:- MAWAI, OLD  
FARIDABAD.  
HARYANA



[www.ionmaxeng.com](http://www.ionmaxeng.com)



+91 9810337622

+91 9310337622



[ionmaxengineers@yahoo.in](mailto:ionmaxengineers@yahoo.in),  
[rajeevionmax@gmail.com](mailto:rajeevionmax@gmail.com),  
[rajeev@ionmaxeng.com](mailto:rajeev@ionmaxeng.com)

Follow Us



# Welcome To IONMAX ENGG.

Established with an intention to provide a sustainable water treatment solution, the company aims at **REDUCING, REUSING, and of RECYCLING** the maximum amount wastewater coming from various domestic and industrial activities in order to efficiently utilise the existing water resources. Ionmax Engineer provides the best solutions for treating the toughest water at the most economical operational cost. Committed to the "Last Drop Concept" theory of saving the optimum quality of water while treating, Ionmax offers maximum value for money and stands by its solemn pledge to build a better world of pure water.

Aiming to be a leading water treatment company creating sustainable, efficient and innovative solution and having served more than 3000 happy customers by 2025 Till date we have commissioned 1055+ water treatment plants for over 800+ clients, including L&T, MAPL, Maniyank, MGS, MICRONZ, OMAXE, OPPO, Radisson, Airtel, Samsung, DMRC, Havells, Khaitan, Landcraft, McDonalds etc.

Internationally, we have our presence in Nepal, Bhutan, Bangladesh, Sri Lanka, Afghanistan, Qatar, Dubai & Malaysia.

We are one of the few organisations in the water treatment industry that own best in class manufacturing and R&D facilities and follow ISO guidelines for water, wastewater, and efficient testing.

## Our Business Association







**Specifications:**

**FlowRange:** 1KLD to 5 MLD  
**Materials:** FRP/SS/MSRL/MSEP and Civil construction.  
**Operation:** Semi-automatic/fully automatic plants.  
**Service:** 24/7 Support Available.  
**Maintenance:** Complimentary AMC for the initial year.  
**Installation & Commissioning:** Free, as part of the project.

**STP Plants Applications:**

*Residential Building*  
*Commercial Building*  
*Institutional Organization*  
*Hospitality Industry*  
*Hospital Building*  
*Municipal Sewage Treatment Plant*  
*Public Transport System*  
*Major Public Events and Festivals*

**SEWAGE TREATMENT PLANT (STP)**

Sewage Treatment Plant (STP) has become a statutory requirement of all the State Pollution Control Boards. . We provide economical, easy to install, and operate STP. Our STP are with precision designed to receive waste from domestic, commercial, and industrial sources and effectively remove materials that contaminate water quality. Our STP are well appreciated for their high-quality standards. We provide complete solutions for sewage treatment plants (STP), which includes biological, physical, and chemical treatment based on the latest technologies.

**OUR SERVICES, FEATURES AND BENEFITS**

Our qualified team of professionals successfully manufacture & supply Sewage Water Treatment Plants.

**Some of the key features of our STP being**

1. Easy to install, and come with a user-friendly interface.
2. Compact design offers smooth functioning.
3. Designed robustly, our sewage water treatment plants are highly durable
4. Come with weather-proof body along with the high anti-corrosive .
5. Confer unbeatable performance aspects, demanding low maintenance .
6. Effectively remove contaminations from wastewater .
7. Fully automated controlled system.
8. No delicate expensive membranes.
9. Basic innovation utilized is enacted slop process.

»»» **Technology of STP**



**EA STP Plant**  
*(Extended Aeration Sewage Treatment Plant)*



**MBR STP Plant**  
*(Membrane Bioreactor Sewage Treatment Plant)*



**SBR STP Plant**  
*(Sequencing Batch Reactor Sewage Treatment Plant)*



**MBBR STP Plant**  
*(Moving Bed Biofilm Reactor Sewage Treatment Plant)*



### Specifications:

**Flow Range:** 250LPH to 100m3/hr

**Materials:** FRP/SS/MSRL/MSEP and Civil construction.

**Operation:** Semi - automatic / fully automatic plants

**Maintenance :** Free AMC for first year and Installation

### Ultra Filtration Applications:

*Output of STP*

*Output of ETP*

*Inlet of RO*

*Output of WTP*

We engineers and manufactures the most advanced Ultrafiltration (UF) systems for water treatment purposes that fit the needs of different industries and applications such as chemical and pharmaceutical manufacturing, food and beverage processing, wastewater treatment...etc.



### ULTRA FILTRATION SYSTEM FOR WASTE WATER

#### Specifications:

**Flow Range:** 250LPH to 100m3/hr

**Materials:** FRP/SS/MSRL/MSEP and Civil construction.

**Operation:** Semi - automatic / fully automatic plants

**Maintenance :** Free AMC for first year and Installation

### ULTRA FILTRATION SYSTEM

Ultrafiltration Plant is used in both pretreatment and post-treatment of water. We supply and install custom-made ultrafiltration Water systems (UF Systems) up to 10m<sup>3</sup>/ 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.

### OUR SERVICES, FEATURES AND BENEFITS

Our Ultrafiltration systems are modular units fixed on a skid frame (Powder coated MS or SS) fitted with inlet and outlet and product water connections.

### Some of the key features of our Water Softener being

1. With ultrafiltration, all dirt particles, bacteria and viruses are filtered, which reduces the growth of biofilm. The eventual product of ultrafiltration is clean and safe (drinking) water.
2. The filtering effect is always active, regardless the power supply. Therefore it is a very effective and sustainable way of water filtration.
3. Every 24 hours the gatekeeper systems test themselves for membrane ruptures. If a breakage occurs, an alarm will be issued.



### ULTRA FILTRATION SYSTEM FOR BORE WATER

#### Specifications:

**Flow Range:** 250LPH to 100m3/hr

**Materials:** FRP/SS/MSRL/MSEP

**Operation:** Semi - automatic / fully automatic plants

**Maintenance :** Free AMC for first year and Installation





# Zero Liquid Discharge Plants (ZLD)



**WORLD'S  
MOST ENERGY  
EFFICIENT  
ZLD PLANTS.**

Based on  
**Mechanical Vapour  
Recompression technology  
(MVR)**

- Zero Liquid Discharge is a process that is beneficial to industrial and municipal organizations as well as the environment because no effluent, or discharge, is left over.
- Increasingly, legislation and industry demands a zero liquid discharge with a solid product that can either be sold more readily dumped in a sealed landfill.
- ZLD systems employ the most advanced wastewater treatment technologies to purify and recycle virtually all of the wastewater produced.
- A Zero liquid discharge facility (ZLD), is an industrial plant without discharge of waste waters. Target ZLD is normally reached by:
  - Waste water strong recovery
  - Separation by evaporation or boiling of water part of waste water not reusable, in evaporators, crystallizers and condensate recovery. ZLD plants produce solid waste.

ZLD discharge system overview ZLD technology includes pre-treatment and evaporation of the industrial effluent until the dissolved solids precipitate as crystals. These crystals are removed and dewatered. The water vapor from evaporation is condensed and returned to the process.



**Specifications:**

*Flow Range:* 1 KLD to 5 MLD  
*Materials:* FRP/SS/MSRL/MSEP and Civil construction.  
*Operation:* Semi-automatic/fully automatic plants.  
*Service:* 24/7 Support Available.  
*Maintenance:* Complimentary AMC for the initial year.  
*Installation & Commissioning:* Free, as part of the project.

**ETP Plants Applications:**

*Laboratory*  
*Commercial Washing Units*  
*Industry*  
*Hospitality Industry*  
*Hospital*  
*Food & Beverages*  
*Pharmaceutical Industry*  
*Automobile Industry*

**EFFLUENT TREATMENT PLANT (ETP)**

Water is one of the essential components in today’s manufacturing processes. Water gets contaminated with various external substances like chemicals, dust, organic compounds, biological material, debris, dirt, grit, pollution, toxic, non-toxic materials, and polymers, also called Effluent. This water is not fit for environmental discharge and is harmful to all living beings. Effluent Treatments Plant (ETP) is a system that removes above given Effluent from industrial wastewater and makes it fit for Human use and fit for Environmental discharge.

**OUR SERVICES, FEATURES AND BENEFITS**

We have Effluent Treatment plants designed for small, medium, and large scale, i.e., from 1 KLD effluent treatment system to 500 KLD.

**Some of the key features of our STP being**

1. Fully Customized Designed System.
2. Lowest Operation & Maintenance Cost.
3. Operator Friendly.
4. Easy to Upgrade.
5. Technology approved by CPCB. (Central Pollution Control Board).
6. Applicable for CDM Benefit.
7. Reducing operating cost.
8. Compact plant requires very less space.
9. Removal of biodegradable organic matter and suspended solids.

**>>> Technology of ETP**



**ETP PLANTS**  
*(Effluent Treatment Plants)*



**CETP PLANTS**  
*(Common Effluent Treatment Plants)*



**INDUSTRIAL ETP PLANTS**  
*(Industrial Effluent Treatment Plants)*



**Compact / Portable ETP**  
*(Compact / Portable Effluent Treatment Plants)*





### Specifications:

**Flow Range:** 100 LPH to 100 KLPH (100m<sup>3</sup>)

**Materials:** FRP/SS/MSRL/MSEP and Civil construction.

**Operation:** Semi - Automatic / Fully Automatic plants

**Service:** 24\*7 Support Available

**Maintenance :** Free AMC for first year

**Installation & Commissioning:** Free, Parts of Project

### DM Plants Applications:

*Laboratory*

*Commercial Washing Units*

*Industry*

*Hospitality Industry Hospital*

*Food & Beverages*

*Pharmaceutical Industry*

*Automobile Industry*

## DEMINERALISATION WATER 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. Ionmax manufactures a wide range of custom-built DM Water plants for industrial processed water applications, with inherent design to conserve water and save costs. The DM Plants are available in different sizes and materials, manually operated or fully automatic, & ready to install.

## OUR SERVICES, FEATURES AND BENEFITS

Our demineralization water systems are designed to last for a more extended period because of the proper selection of construction and design material.

## Some of the key features of our DM Plants being

1. The water produced by these units is of much higher quality than the regular distilled water we use.
2. Choose from DM plants of different sizes and boasting different specifications. Units designed & manufactured to be used in labs as well as for large, medium, and small-scale industries.
3. The purification process doesn't involve the use of any chemical. Additionally, the process also doesn't produce any dangerous waste products.
4. Units will not need much space for storage.
5. Using DM plants to demineralise water has been found to reduce the overall product cost at industrial manufacturing units.



## MIX BED PLANT

Our Mixed Based Plants have a long life, are iron corrosion Proof, and require less maintenance. We provide a wide range of products in Mix Bed Plant Category to our Clients. Ionmax is a leading Manufacturer of Mix Bed Plant and Mix Bed Unit, Mixed bed systems are mainly used in the water purification industry for polishing process water to achieve demineralized water quality. To exchange the ions charge (i.e. +ve to -ve or -ve to +ve). A mixed bed ion exchanger uses two ion-exchange regenerative systems formed in beads shape. The mixed bed usually contains a strong acid cation exchange in addition to a strong base anion exchange resin. It completely removes the hydrogen and hydroxyl ions from the purified water.





## WATER SOFTENER PLANT

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. Softener resin is mainly strong acid Cation resin.

### Specifications:

**Flow Range:** 250LPH to 100m3/hr

**Materials:** FRP/SS/MSRL/MSEP and Civil construction.

**Operation:** Semi - automatic / fully automatic plants

**Maintenance :** Free AMC for first year and Installation

### Water Softener Plants Applications:

*Agriculture*

*Cooling Tower*

*Boiler Feedwater*

*Domestic Use*

*-Bathing, Washing etc.*

## OUR SERVICES, FEATURES AND BENEFITS

We design and manufacture very efficient Water softeners that are effective in reducing the hardness.

### Some of the key features of our Water Softener being

1. Automatic regeneration.
2. Increases the efficiency of appliances and the plumbing Systems.
3. Require less space.
4. Anticorrosive parts.
5. Efficaciously cleanses the harmful particles.
6. Clogging from pipes and vessels.
7. Light weight & compact. Low power consumption.



## INDUSTRIAL WATER SOFTENER PLANT

### Specifications:

**Flow Range:** 250LPH to 100m3/hr

**Materials:** FRP/SS/MSRL/MSEP

**Operation:** Semi - automatic / fully automatic plants

**Maintenance :** Free AMC for first year and Installation

## DOMESTIC WATER SOFTENER PLANT

### Specifications:

**Flow Range:** 250LPH to 50m3/hr

**Materials:** FRP/SS/MSRL/MSEP

**Operation:** Semi - automatic / fully automatic plants

**Maintenance :** Free AMC for first year and Installation

## WATER TREATMENT COMPONENTS

RO, ETP, STP, DM, WATER SOFTNER, WWTP



TUBE SETTLER MEDIA



MECHANICAL BAR SCREEN



PLATE & FRAME TYPE FILTER PRESS



SLUDGE DEWATERING SCREW PRESS



CENTRIFUGE MACHINE



MULTIPOINT VALVE



BELT TYPE OIL SKIMMER



COURSE BUBBLE DIFFUSERS



DISOLVE AIR FLOATATION SYSTEM



DOSING PUMP



ION EXCHANGE RESIN



PRESSURE GAUGE



TWIN LOBE AIR BLOWER



FILTER MEDIA



AGITATOR MIXER



ACTIVATED CARBON



FILTER CLOTHES



FINE BUBBLE DIFFUSERS



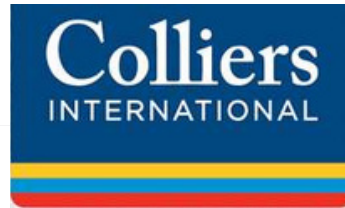
MBBR MEDIA



ETP & STP PANEL



## OUR CLIENTS



Ganga Jamuna Steel Pvt Ltd

