

WE CREATE VALUE BY SUCCESSFULLY  
**PLANNING & EXECUTING THE PROJECTS...**



**UNITEDPURiO WATER**  
SOLUTIONS PRIVATE LIMITED





**UNITEDPURI<sup>o</sup> WATER SOLUTIONS PVT LTD (UPWS)** is a registered company focusing on universal solutions for local water problem by new technologies and product innovations for purification & conservation of water as well as for waste minimization. We undertake contracts for turnkey jobs in the field of water, sewage and industrial effluents. The company has the necessary expertise and professional skills to provide appropriate solutions to the very complex environmental problems at optimal cost.

Our strengths lies in the rich and varied experience of our engineer experienced in water and wastewater treatment and desalination over 30+ years in India with precise capability in quality control ,process design, in-depth engineering, Installation, commissioning.



## Where the Water Supply Comes From?



### **Surface Water**

which is susceptible to contamination directly entering the supply



### **Ground Water**

which is susceptible to contaminants that are present in the soil and the rock as the water makes its way to the aquifer.

## Contaminants might be present in Water?



### **Microbiological**

Virus or bacteria from sewage, agriculture or wildlife



### **Inorganic**

Rock or metal based, usually naturally occurring



### **Pesticides**



### **Organic**

Carbon based, usually industry by-product



### **Radioactive**

Typically naturally occurring, but could be elevated by mining operations

So healthy living of your family counts on the availability of pure water. But pure water is scarcer with advancement of human race and it has become inevitable to assure the quality of ground water before having it for drinking or other purposes. Fresh water resources are fast depleting due to several factors like urbanization, industrial pollution, climate change, increase in population etc.

Being aware of the above fact, we offer complete solution for pure water availability for houses and industries with innovative products & new technologies.



## SAND FILTER PRESSURE SAND FILTER



We are providing quality certified array of Pressure Sand Filter, which is especially demanded for removal of suspended solids & un-dissolved impurities. These impurities are generally heavy metals and dust particles. The pressure sand filter is highly suitable for the systems with high sediment, silt, sand, and turbidity. Our filter ensures the maximum utilization of the surface area, lesser pressure drop across the pressure bed and effective elimination of the impurities. Its application area includes swimming pool water, pre filtration for membrane system, production for drinking water and many more.

### Features :

- Non corrosive and cost effective solution
- Suitable for residential, large commercial and industrial applications
- Consists of a multiple layer of sand with a variety in size and specific gravity
- Available in different sizes and materials both hand operated or fully automatically

**Applications :** Production of drinking water | Filtration in swimming pools | Filtration of gray or surface water | Preparation of cooling water  
Treatment of wastewater | Pre filtration for membrane systems

## ACTIVATED CARBON FILTER



We are developing high grade Activated Carbon Filter that is built keeping in mind the domestic and global parameters. An activated carbon filter removes free chlorine, chloramide, chlorine dioxide, phenols, organic solvents, and pesticides. Recently, the application area of carbon filtration has widened in various industries, breweries, waterworks and wastewater treatment. It plays a crucial part in the process of removing pesticides in drinking water. The product range comprises filters of many different sizes and materials as per the requirement of our clients. We offer these in stainless steel with CIP (Cleaning in Place) for disinfection.

### Features :

- Compact units with robust mild steel powder coated frames
- Range of models and capacities
- Economical & efficient way of removing dissolved solids
- Easy to start-up and use
- Can handle fluctuation of total dissolved solids removal
- Easy availability of spares and service
- Built in safety features for protecting high pressure pump membranes
- Fully assembled and tested before dispatch

**Applications :** Pharmaceutical industry | Power Plant | Textile industry | Oil & Gas sector  
Chemical industry



## IRON REMOVAL SYSTEM



Iron is a objectionable constituent in drinking water. Coloration of water to yellowish brown or reddish brown indicates high content of iron. Concentration of Iron in excess of 0.2 to 0.3 mg/l may cause nuisance in various application of water. Iron-bearing water can stain wash basins, toilets, urinals, bath tubs, showers, tiled floors and walls. Also presence of iron in water interfere in various industrial applications.

**Applications :** Hotels | Restaurants and Houses | Laundry | Textile and Dying Industry  
Dairy and Food Products | Package Drinking Water Industry

## WATER SOFTENING SYSTEM



Pure water is tasteless, colourless, and odourless, which is a universal solvent. Calcium and magnesium dissolved in water make the water "HARD" which contributes to inefficient and costly operation of water-using appliances. Heated hard water forms a scale of calcium and magnesium minerals that can contribute to the inefficient operation or failure of water-using appliances and pipes.

**Applications :** Hotels | Restaurants and Houses | Boiler Feed water  
Dairy and Food Products | Laundry Applications

## SEWAGE TREATMENT PLANT



offered is designed and developed using latest technology support and well researched bio-treatment process that makes them deliver efficient performance. Further, the plant also comes with support of conventional air exhaust, soil deodorization support, automatic electric control system and other working supports so as to provide for reliable performance. Some of its features include makes use of biological contact oxidation pond for better performance, supports treating domestic sewage and related organic sewage, features easy operations, automatic control, convenient maintenance, suitable for

use in areas like hotel, hospital, airport, factory, supports removing physical, chemical and biological contaminants.

**Applications :** Hotels | Airport | Factory

## EFFLUENT TREATMENT PLANT



Offered features use of advanced bio-treatment technology and is backed by extensive research and engineering efforts so as to provide for optimum process support involving treatment of effluents. These plants are also well recognized for stable performance, effective treatment support as well as economical performance. Some of its features include provides for convenient operation and maintenance support, suitable for application in areas like hotel, brewery, hospital, school, station, factory and others, offers support as zero liquid discharge effluent treatment system.

### The Main Advantages of Packaged ETP (MBBR/FAB based) are :

Compact and sturdy design | Odourless | Low power consumption | Easy maintenance | Rapid installation

**Applications :** Hotel | Brewery | Hospital | School | Station | Factory and Others

## REVERSE OSMOSIS PLANT



offered comes with well integrated design support and is designed to provide for easy installation and maintenance. Making use of corrosion resistant components so as to enhance service life of RO plants, these provide optimum support in meeting the demands of improving water TDS under 2000ppm and making it fit for drinking. Further, these advanced technique based water purifying machines can be custom configured as per the specific water treatment needs of the customers. Some of its features include available in designs for both small and large scale operations, comes supported by variety of protective measures for safe operations, can be customized and configured to

suit individual requirements, suitable for use in areas like food processing, pharmaceuticals, boiler feeding requirement and others, ability to withstand variations in feed water quality.

### Features :

- Consistent operation
- Smoothness in operation
- Ruggedly constructed
- Enhanced performance
- Increased solid removal
- Provides process stability
- Energy efficient

**Applications :** Offices | Hospitals | Residential complexes | Schools | Colleges

## DEMINEALIZATION PLANT



For many laboratory and industrial applications, high-purity water which is essentially free from ionic contaminants is required. Water of this quality can be Produced by deionization.

### The Two most common types of Deionization are:

Two-bed deionization | Mixed-bed deionization

**Two-bed Deionization:** Two Bed DM Plant comprise of two mild steel rubber-lined /FRP pressure vessels filled with strong acidic cation exchange resin and strongly basic anion exchange resin. They are available in a range of diameters. The modular construction permits flexibility in the selection of cation and anion units to cater to different types of raw water. Degasser modules for the range Of CA units are

also available. These are useful for raw waters containing a significant amount of alkalinity. Treated water of conductivity less than 10 microsiemence/cm with ph of 7.5 to 8.5 is achieved at Two Bed DM Plant outlet.

**Mixed-bed Deionization:** Mix Bed DM Plant comprise of one Mild steel rubber-lined/FRP pressure vessels filled with strong acidic cations exchange resin and strongly basic anion exchange resin in mixed form. They are available in a range of diameters. Mix Bed DM Plant is usually used as polishing unit at outlet of Two Bed DM Plant/RO Plant. The modular construction permits flexibility in the selection of cation and anion units to cater to different types of raw water. Treated water of conductivity less than 1 microsiemence/cm with ph of 6.5 to 7.5 is achieved at Mix Bed DM Plant outlet.

**Applications :** Foundries | Food & Beverages | Pharmaceuticals | Electroplating & Semiconductors | Cosmetics Industries | Paper & Pulp Industry

**Range:** We can supply these plants in specifications as per the requirements. Flow range of 1.0-10.0 m<sup>3</sup> / hr and even more.

## WATER FILTER PLANT- SWIMMING POOL



We are engaged in catering to the variegated requirements of the customers by bringing Swimming Pool Filtration System. Optimum-grade basic material coupled with latest technology is employed in manufacturing of these systems to satisfy the divergent demands of the clients. Further, these systems are offered in different specifications to suit the divergent demands of the clients.

### Features :

- Compact unit with robust mild steel powder coated frame
- Built in safety features to protect high pressure pump membranes
- Fully assembled and tested before dispatch

**Advantages :** The most economical & efficient method of dissolved solids removal | Easy to start up and uses very little space on solids in feed water | Can handle fluctuations of total dissolved solids removal | Easy availability of spares and service Short delivery periods



- INDUSTRIAL MEMBRANES
- MULTI PORT VALVES
- FRP VESSELS
- DOSING PUMP
- HIGH PRESSURE PUMP
- FRP HOUSING
- FLOW METERS
- GAUGES
- CHEMICALS
- FILTER MEDIA
- ACTIVATED CARBON
- RESINS etc.,

**All Components available for  
Industrial & Domestic Purposes**



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