



WATWA
we are all about **WATER!**



Water is life

Services

AMC
SPARES
CHEMICALS

Our Products

SEWAGE TREATMENT PLANT
EFFLUENT TREATMENT PLANT
REVERSE OSMOSIS PLANT
SOFTENERS
DE-MINERALISATION SYSTEM
IRON REMOVAL PLANT
ULTRAFILTRATION
RAIN WATER HARVESTING



WATWA

we are all about WATER!

The Company

Watwa was founded with a vision to create a company that could solve many of the world's most difficult environmental problems relating to water treatment, re-use, and wastewater technology solutions.

Some of the most pressing global environmental issues are instigated by the twin problems of growing water pollution and global water shortage.

We have dedicated the entire focus of Watwa toward the research and development of applied water and wastewater technologies and solutions.

We provide Sustainable Water Management Solutions

We believe that we have an important role to play in helping to preserve the global environment while at the same time being a socially responsible corporation.

Watwa is able to offer state of the art water and wastewater treatment capabilities that can be found in thousands of applications around the world.

Our staffs include talented engineers, technologists and seasoned managers. Our capabilities range from evaluating environmental water problems, designing

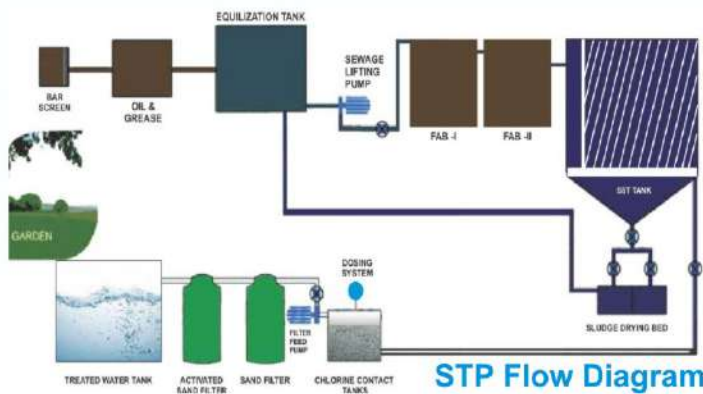
water treatment solutions and manufacturing wastewater systems, to commissioning water and wastewater equipment in the field.

We are 100% focused on water and wastewater treatment solutions and we specialize in designing water and wastewater treatment plants and equipment that are compact, energy efficient, reliable and simple to operate.

Watwa has established a reputation for design, engineering and manufacturing excellence. Partnership is a key driving force in everything that Watwa does. We strive to establish long term relationships with our customers, engineering firms, suppliers and representatives. We value these relationships and consider them our most important asset.

SEWAGE TREATMENT plant

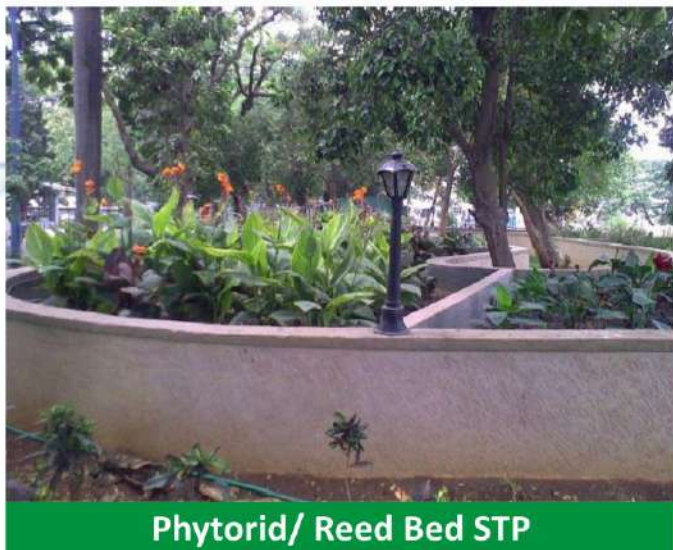
Sewage treatment, or domestic wastewater treatment, is the process of removing contaminants from wastewater and household sewage, both runoff (effluents) and domestic. It includes physical, chemical, and biological processes to remove physical, chemical and biological contaminants. Its objective is to produce an environmentally-safe fluid waste stream (or treated effluent) and a solid waste (or treated sludge) suitable for disposal or reuse (usually as farm fertilizer). Using advanced technology it is now possible to re-use sewage effluent for drinking water.



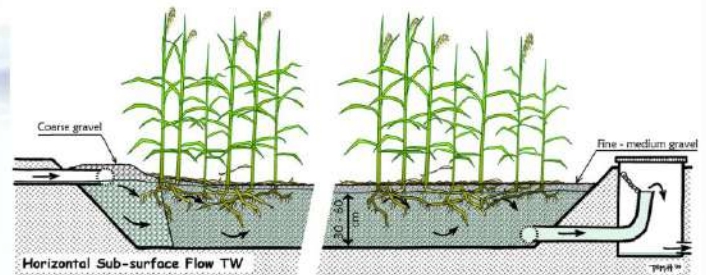
We Design, Fabricate, Supply, Erection and Commissioning Sewage Treatment Plants (STP) for treating sewage generated by Industry, large colonies, Hotels, Hospitals, IT Parks and commercial buildings.

Technologies Used :

- MBBR : Moving Bed Bio Reactor
- CWT : Constructed Wetland Technology
- SAFF : Submerged Aerated Fixed Film
- SBR : Sequential Batch Reactor
- MBR : Membrane Bio Reactor



CWT - Constructed Wetland



- SIMPLE TO OPERATE
- HUGE SAVING ON ELECTRICITY
- NEGLIGIBLE MAINTENANCE
- MEETING POLLUTION BOARD NORMS
- MEETING GREEN BUILDING CRITERIA

EFFLUENT TREATMENT plant

There are a vast array of effluent treatment technology available. Industrial waste water treatment covers the mechanisms and processes used to treat waters that have been contained in some way by industrial or commercial activities prior to its release into the environment or re-use.

Pollutants are substances that have the potential to have negative effects on the natural environment, to cause damage to infrastructure or harm to human health.

Pollutants in industrial waste water contain a mixture of organic and inorganic substances, in solution, as solids in suspension, as a separate phase (e.g. starch or clay).

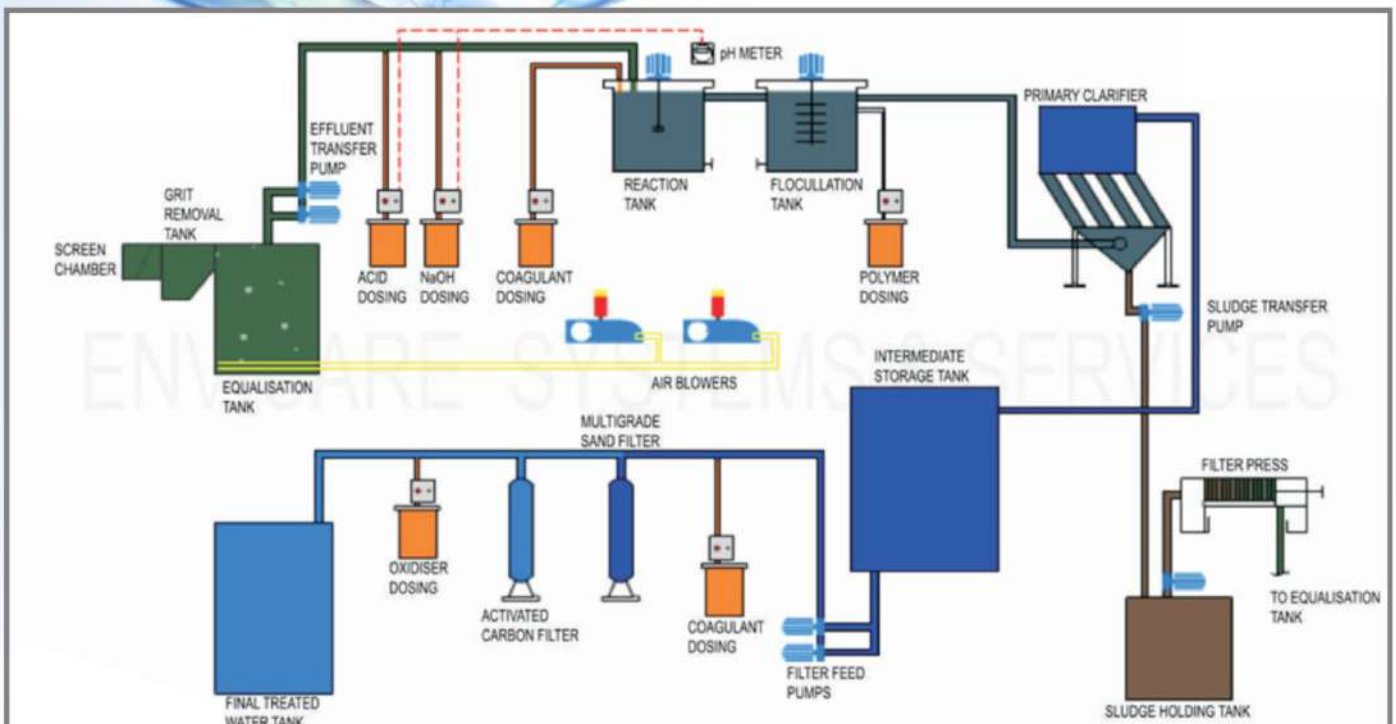
Some pollutants are toxic and/or harmful and can have a direct impact on the receiving environment e.g. heavy metals, mineral oils, solvents, strong acids and alkalies.



Our ETP systems are very compact, tailor made designs, portable required very less foot-print to accommodate, energy efficient. The up-gradation, modification in the existing ETP system is possible to achieve desired limiting standard laid down by the Pollution Control Board (PCB).

SPECIFICATIONS

TREATMENT	DESCRIPTION	PROCESS
Preliminary	Removal of large solids such as rags, sticks, grit and grease that may damage equipment or result in operational problems	Physical
Primary	Removal of floating and settle able material such as suspended solids and organic matter	Physical and Chemical
Secondary	Removal of biodegradable organic matter and suspended solid	Biological and Chemical
Tertiary	Removal of residual suspended solids/desolved solids	Physical, chemical and biological



REVERSE OSMOSIS plant

Reverse osmosis (RO) is a membrane-technology filtration method that removes many types of large molecules and ions from solutions by applying pressure to the solution, when it is on one side of a selective membrane. The result is that the solute is retained on the pressurized side of the membrane and the pure solvent is allowed to pass to the other side. To be "selective," this membrane should not allow large molecules or ions through the pores (holes), but should allow smaller components of the solution (such as the solvent) to pass freely. Reverse osmosis is used to purify Water and remove salts and other impurities in order to improve the color, taste or properties of the fluid.

STANDARD FEATURES

Quality: Material of construction – Mild Steel / Stainles Steel

Piping – Stainles Steel / UPVC

Skid – Skid to mount the whole system

Feed Pump – For feeding of raw water

Sand Filter – For removal of suspended solids present in the raw water

Anti-scalant Dosing System – To control the scaling of the RO membranes

Micron Cartridge Filter – To filter impurities of the water up to 5 microns

High pressure Pump – To feed the water to RO membranes at reverse osmosis pressure

Reverse – To remove the total dissolved solids of the water



ULTRAFILTRATION plant

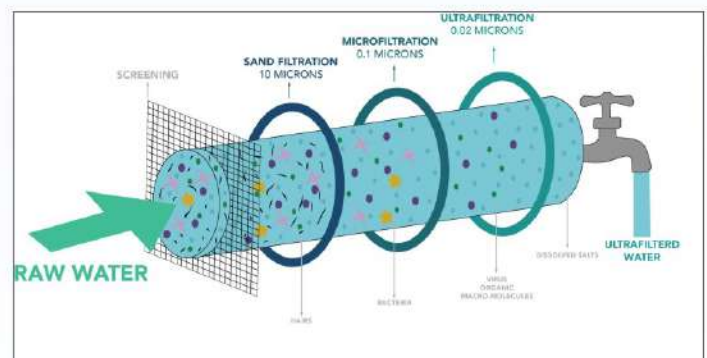


Ultrafiltration (UF) is a membrane filtration process similar to Reverse Osmosis, using hydrostatic pressure to force water through a semi-permeable membrane. The pore size of the ultrafiltration membrane is usually 103 - 106 Daltons. Ultrafiltration (UF) is a pressure-driven barrier to suspended solids, bacteria, viruses, endotoxins and other pathogens to produce water with very high purity and low silt density.

Ultrafiltration (UF) is used to remove essentially all colloidal particles (0.01 to 1.0 microns) from water and some of the largest dissolved contaminants. In general, membrane pores range in size from 0.005 to 0.1 micron.

Some Applications :

- Wastewater Treatment
- Drinking Water Purification And Disinfection
- Pre Treatment For Reverse Osmosis Plants

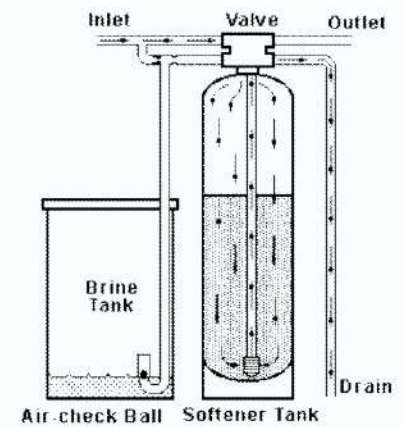


Water Softener



ION Exchange Softening Process :
Softening of Water is almost exclusively effected by ION Exchanges. In this Process the calcium and magnesium ions are exchanged by sodium ions, so that the hardness forming components are converted into soluble sodium salts. Softening is carried out by simple filtration through the exchange material.

CONTROL VALVE
State of the art design and with in-built ejector system, multi port valve for compact design.



DM Water & Filtration Plants

Watwa offers DM Plants in various combinations using Weak Acid Cation Exchanger (WAC), Strong Acid Cation Exchanger (SAC), Weak Base Anion Exchanger (WBA), Strong Anion Exchanger (SBA) Unit either with De-gasification Unit (DG) for CO₂ Removal. The Systems have Following Configuration based on the water report or parameters.

Mixed Bed DM Plants (MB) units are offered as a Polisher Unit to get conductivity less than 0.5 micro Siemens/cm or 0.05 micro Siemens/cm conductivity with 2 MB units in Series Systems are either offered in FRP or in Mild Steel Rubber Lined as per client's requirement. Systems are available with flow Rate up to 50 M³/hr in FRP and up to 200 M³/hr or more with Twin Trains.

Our mixed-bed de-mineraliser are used where water of extremely high purity is needed. They have cation and anion exchanger resins mixed in a single column. This achieves higher purity standards, more neutral pH and greater silica and CO₂ removal control than can be done with a Two-bed system.



Iron Removal Plant

The process through which iron is removed from water is known as Oxidation Filtration that involves the oxidation of the soluble forms of iron (Fe) and manganese (Mn) to their insoluble forms and then removal by filtration. The oxidant chemically oxidizes the iron and manganese (forming a particle), and kills iron bacteria and any other disease-causing bacteria that may be present after that the filter removes the iron and manganese particles.



Components and Consumables

Dosing Pumps		FRP Vessels		Hydropneumatic Tanks	
Spectrophotometers		Pressure Boosting KIT & Accessories		Filter Media	
Settling Media		Aerator/Diffuser		Vertical Multistage Pumps	
Online PH testers		Multi Port Valves		MBBR/FAB Media	
Rotameter		RO Housings		Membranes	
TDS testers		Filter Chartridges		RO and Water treatment chemicals	

कीमत
समझो
पानी
की !



WATWA ENGINEERS PVT. LTD.

Head Office : 45, Mega Dream Homes
Karamchari Nagar, Bareilly (U.P.) 243122

Branch Office : 229, Neelkanth Arcade
43-Rajpur Road, Dehradun (U.K.) 248001

Branch Office- M-1204, Raksha Adela,
Gaur City - 2, Greater Noida (W), U.P. 201301

Branch Office : Plot No. 06, Gaurav Vihar
Chinhat, Lucknow (U.P.) 226028

Factory Address : I-4, I-5 UPSIDC
Industrial Area Phase -1
Sandila, Hardoi (U.P.) 201204



WATWA

we are all about **WATER!**

Contact us :

Shashi Kant - +91 9760858777

Sanjay Yadav - +91 6394794287

Email : info@watwagroup.com

Website : www.watwagroup.com

Connect us



Environment Urge: "If This Catalogue Is Not In Your Use, Kindly Transfer It To Whom It is Needed."
Save Paper. Save Trees. Save Environment. Save Life.