

OUR PRODUCTS

- REVERSE OSMOSIS PLANT
- WATER FILTRATION PLANT
- DEMINERALISATION PLANT
- PACKAGED DRINKING WATER PLANT
- WATER SOFTENING PLANT
- PRESSURE BOOSTER SYSTEM
- EUTECH INSTRUMENTS
- FLIR THERMAL IMAGING CAMERA



ABOUT US



UNITECH WATER SOLUTION as an organization with a mission of rendering extensive services in the critical area of Water Management through a complete suit of water solutions backed by cutting edge expertise and Hi-End Infrastructure which essays a multi-faceted organization being the knowledge bank as well as the disseminator of Hi-end Service Provider.

Today, we are better because we have much broader market capability and a more diverse work force to address our customer's evolving needs. We are a focused firm, empowering

growth with persistent dedication and adherence to business ethics, crystal clear ascendancy and obligation to highest standards of social responsibility.

In our drive to become a globally recognized service provider; we offer a complete gamut of technologies, manufacturing capabilities, Project management and engineering infrastructure covered under one roof. Water is the very picture of change, flux, and transformation. No two moments are alike. At Unitech, we have blended ourselves to these cardinal virtues of water.

Unitech today has people; Product and Services at place and our clients can be assured of Quality Products and Reliable Services. Unitech not only provides Package Systems but also supplies complete turnkey projects depending on the customers' needs and demands. These tailor made systems can be combination of different pre and post treatment equipments depending on the quality aspects at both inlet and outlet.

QUALITY

Quality has always been the trademark of our business entity since the day of our inception. Our commitment towards offering reliable quality standards in our assortment of treatment plants has made us top notch manufacturer and supplier of water treatment plants for industrial purposes. Only superior and high quality raw material and components procured from trusted vendors are used in the manufacturing process. Moreover, all these plants undergo stringent quality testing on all the well defined parameters to ensure high performance and a longer service life. The precision engineered gamut of water treatment plants ensures superior functionality

OUR MISSION & VISION

The company is well known for its product reliability, credibility, innovation, consultancy and prompt service. It is our mission – the basis of our existence – to successfully develop, produce and sell high-quality systems worldwide, contributing to a better quality of life and a healthy environment.

Consistently grow by providing products and services of international standards so as to maintain high level of customer satisfaction and profitability, through mutual growth & prosperity through value added services.



REVERSE OSMOSIS PLANT

The Reverse Osmosis process uses a semi-permeable membrane to separate and remove dissolved solids, organics, pyroxene, submicron colloidal matter, viruses, and bacteria from water. The process is called "reverse" osmosis since it requires pressure to force pure water across a membrane, leaving the impurities behind. Reverse Osmosis is capable of removing 95%-99% of the total dissolved solids (TDS) and 99% of all bacteria, thus providing safe, pure water.



REVERSE OSMOSIS PLANT

The process of reverse osmosis removes dissolved salts as well as organics. The process can be explained as the raw water flow through the membrane by applying pressure, in the process a small percentage of the feed water permeates the membrane, the balance portion of water moves alongside the membrane without being filtered and moves out of the system. The stream which permeates through the membrane is the permeate, the second stream of water is called the concentrate because it carries the concentrated salts and other contaminants which are not able to permeate through or rejected through the membrane. Since the two streams of liquid flow side by side to each other this process is also called cross flow filtration process.



REVERSE OSMOSIS PLANT - 250 LPH

● FILTRATION SYSTEM

The process of filtration involves the flow of water through a granular bed, of sand or another suitable media, at a low speed. The media retains most solid matter while permitting the water to pass. The process of filtration is usually repeated to ensure adequate removal of unwanted particles in the water. It is the oldest method of filtration but still widely used in municipal water treatment plants today.

Unitech offer a wide range of filtration systems standardised on the basis of specific velocities for each type of filter. Filters are available with single 5-way valve operation & multiple valve operation depending on the flow rate & the application. Filters are available in MS (painted), FRP & HDPE construction.

Types of Filters:

- Pressure Sand
- Activated Carbon
- Dual Media
- Bag
- Micron Cartridge
- Iron removal



FILTRATION SYSTEM

● DEMINERALISATION PLANT

Demineralisation is the Process of removing the mineral salts from water by ion-exchange. Impurities that remains dissolved in water dissociate to form positive and negative charged particles known as ions. These impurities or compounds are called electrolytes. Generally, all natural water has electrolytes in varying concentrations. An ion-exchange vessel holds ion-exchange resin of the required type through which water is allowed to pass. The selective ions in the water are exchanged with ions or radicals loosely held by the resin. In this way, the water is passed through several vessels or a mixed bed vessel so that both positive and negative ions are removed and water is dematerialized.



DEMINERALISATION PLANT (DM PLANT)

SPARES



INSTRUMENTS



CARTRIDGE & HOUSINGS



FRP VESSEL



DOSING PUMP



MEMBRANES



MULTI PORT VALVE

● PACKAGED DRINKING WATER PLANT

We offer world-class mineral water plants. These water plants are designed as per the advanced technology. These plants use multistage fine filter, UV sterilizer, terminal fine filter etc. to remove larger molecules namely colloid and germ. After treatment, water becomes safe for drinking purpose.



Features:

- Equipped with suitable Pre-treatment with high quality components
- ASME approved FRP/ SS Vessel for Pre-treatment & Pressure Vessel for RO Membrane
- Latest Dosing system over conventional Softening Plant
- Micron Cartridge Filter for Pre-treatment of RO Membrane
- User friendly Microprocessor / PLC based Electrical Control device with Dry Running Protection
- Monitoring devices & instruments are provided
- Optimum water quality is produced by TFC (Thin Film Composite) RO Membrane with Raw Water & High Pressure SS 304 / SS 316 multistage centrifugal pumps.
- Sample valves for easy water quality testing and to guarantee system performance
- Food grade UPVC (SCH-40/80) piping from raw water pump to high pressure pump & SS 316 High pressure piping.



OZONATOR



FILLING MACHINE - 60 BPM



UV SYSTEM & STORAGE TANK



MINERAL WATER PLANT - 5000 LPH



BLOW MOULDING MACHINE

● WATER SOFTENING PLANT

Softening is a process where Calcium and Magnesium ions are exchanged for Sodium ions. Calcium and Magnesium ions associated with Alkalinity contribute for scale formation. These ions are also called as Total hardness. The strong acid Cation exchange resin in Sodium form is used for softening the water. When the resin is exhausted, it is regenerated with brine solution (Sodium Chloride) 10 % or 15% brine solution is normally used for the regeneration. If the brine solution is passed from the bottom of the resin and service flow is from the top, then it is called as Up flow softener. If the service and regeneration flows are from top to bottom, then it is called as down flow softeners. The softeners are run up to the Hardness slip of 5 ppm as CaCO₃ in the treated water, which is called as Industrial Zero hardness.



SOFTENING PLANT WITH MGF

● PRESSURE BOOSTER SYSTEM

OPERATION

A Pressure Boosting Set primarily consists of pumps, a control panel and accumulator (to meet small demands), all packaged with valves to provide water throughout the system.



PRESSURE BOOSTER SYSTEM

KEY FEATURES

- 1) Constant pressure can be set via the PLC Controller to ensure maximum comfort.
- 2) Optimum Energy saving and Minimum Water Wastage.
- 3) Different timings of operation can be set using the timer function.
- 4) Auto-change over after set timings of individual pump.
- 5) Digital indication of number of pumps running at a time, power consumed by pump, voltage taken pump, number of working hours of each pump.
- 6) Highly efficient energy savings pumps.
- 7) Low operating and maintenance cost.

BENEFITS

- 1) Power saving by reducing pump's running time
- 2) Eliminate Bulky Over Head Tank
- 3) Dry-running protection facility and built-in time relays for ensuring constant and steady operation.

Controlled either by Pressure, Flow or Float Switch sensing, the pumps automatically run until the demand is fulfilled. Sophisticated controls ensure that operation of the pump is rotated to provide even usage so that in the unlikely event that a pump should fail the standby pump is immediately activated to provide unremitting supply. Additionally, the sets are protected against an interruption of the water supply so that the pumps are not run dry causing expensive damage. A range of alarm conditions provides the user with information regarding the status of both the booster sets and system.

● EUTECH INSTRUMENTS

COMPANY PROFILE

It gives me an immense pleasure to introduce UNITECH WATER SOLUTION as an Authorized Distributor of EUTECH INSTRUMENTS (Eutech is part of Thermo Fisher Scientific Inc). Eutech Instruments is a leading ISO 9001 certified company established in 1990. Dedicated to the design and manufacture of sensor-based instruments for water quality analysis, Eutech is a pioneer in the development of ASIC-based (Application Specific Integrated Circuit) instruments, and is internationally recognized for its achievements in sensor technology, software programming and product design. Eutech has an extensive product line, which includes the world's first Windows CE-driven color touch screen research-grade bench meter.

RANGE OF PRODUCTS



HANDHELD METERS



POCKET TESTER



MULTI-PARAMETER BENCH TOP METERS

● FLIR – THERMAL IMAGING CAMERA

COMPANY PROFILE

It gives me an immense pleasure to introduce UNITECH WATER SOLUTION as an Authorized Service Provider of FLIR. FLIR, a world leader in the field of thermal imaging system, headquartered at Sweden and NASDAQ listed company. FLIR, a global company with over 90+ years experience in the field of thermal imaging provides solutions to wide range of application ranging from industrial applications to space and military applications. FLIR offers complete customer solution by providing the world class cameras, training and after sales service to their customer.



FLIR I SERIES



FLIR T SERIES



E-40
FLIR THERMAL IMAGING CAMERA

PRINCIPLE & APPLICATION

Thermal imagers work on the principle of capturing and analyses infrared energy emitted by any hot object. This is a non contact measuring system. FLIR thermal imager is light weight, compact and easy to use. They can be used to address various electrical, mechanical and civil engineering application.

Thermal cameras are mainly used in preventive maintenance and predictive maintenance of electrical and mechanical equipments. Thermal imagers identify and locate the problems from a safe distance ensuring operator safety. They identify the faults before repair becomes expensive or equipment fails. Detects the problems not visible with naked eye. No shutdowns are required for the inspection and can be used when equipment is in operation. They help in planning preventative maintenance schedule by providing the health of the equipment under consideration. The images captured and stored by thermal imagers can be compared over the period for quantitative and qualitative analyses.