



*It's more than just
purification*



COMPANY PROFILE

FREEION ENGINEERING was established in the year 2001 as a water and wastewater treatment plant manufacturer. Over the years the company has expanded its technology base, bringing a wide range of products. The company has its corporate office in Ahmedabad which is the financial capital of Gujarat. With the factory being located in the near by authorized industrial area.

The company is ISO 9001:2008 certified which attests its quality. The company has the entire relevant infrastructure for designing, manufacturing, testing and supply of qualitative water and wastewater treatment plants. The manufacturing unit has all the requisites machinery to manufacture quality products with latest technology.

FREEION ENGINEERING is the first company which offers a wide range of water and wastewater treatment plant, which have been developed keeping in mind the international environment and the customer requirement. The products which have been developed are not only at par with their Imported counter part but also for more economical in comparison.

FREEION ENGINEERING has a complete marketing infrastructure all over India. Inside sales people have year of application experience and are totally capable of helping you determine your best hardware solution, if question exist. We provide in depth technical support both before and after sales. This support is critical because our products are design with flexibility and dependability to provide years of service in cutting edge, and demanding applications. A focus on innovative design and high quality machined part has earned FREEION ENGINEERING a reputation for excellent workmanship amongst its, user. For nearly one decade FREEION ENGINEERING has offered its customer quality, cost-effective machine necessary to meet the changing technology. Our commitment to total quality in both our product and service is the foundation upon which our future business is based.



FREEION ENGINEERING works on customer first policy wherein each of the product supplied is tested and screened before dispatch. The products have been designed keeping the end user in mind that demands for quality products and has the requisite knowledge to distinguish the same. The product have been developed keeping in mind that the water and wastewater treatment plant need flexibility as per the site requirement and easy to installation of the product. The products are manufactured with the product appropriate technology incorporating all the necessary protection features. The products are available with various option of size to suit your need.

MISSION

The "creation of a sustainable company" is at the basis of FREEION ENGINEERING company philosophy, a company deeply linked water and environment, indispensable element for life on earth.

FREEION ENGINEERING intends to "create products gaining customers' trust and satisfaction" and aid countries throughout the world, contributing in creating the infrastructure necessary for achieving sustainable economic and social growth, following the traditions, offering high quality products and services thanks to advance technology and enormous experience.

FREEION ENGINEERING aims to enhance its position of leadership across the world market.

VISION

We have to become the most preferable brand in the field of water and wastewater treatment plants manufacturer. We have to be the quality conscious organizations in implementing water and wastewater treatment solutions of any kind in the world.

OUR ADVANTAGE :

- ISO 9001 : 2008 Company
- In-house manufacturing facility
- In-house research development department
- Clear quality policy implementation at all level
- 16 year's of experience
- Team of qualified professionals

OUR VALUES :

To Provide,

- Superior quality and affordable price
- Maintenance free system
- Reliable product with high durability
- Education about water purification
- Filtering solutions constructed using easily available materials
- Maximizing value for money
- Round the clock service



QUALITY POLICY

We will inculcate high standards amongst our personnel and systems by

- Strictly following quality management processes and effecting improvements thereon
- Bringing in the latest technological know-how
- Striving continually for greater operational efficiency
- Sticking to delivery and project schedules
- Delivering service that is prompt and delights expectations
- Maximizing value-for-money for client
- Empowering personnel through bigger responsibilities and training
- Staying committed to professional management
- Spreading environment awareness and factoring it into all our products



PRODUCT RANGE

1. Revers Osmosis Plant (RO Plant).
2. Sea Water Desalination Plant
3. Pharmaceutical Purified Water Solution
4. Mineral Water Plant.
5. Mineral Water Packing Machines.
 - Jar Washing / Filling Machine.
 - Automatic Jar Rinsing, Filling & Capping Machine
 - Semi / Automatic Pet Blow Molding Machine
 - Automatic Bottle Rinsing, Filling & Capping Machine
 - Automatic Pouch Packing Machine
 - Cup Filing Machine
 - Semi / Automatic Group Packing Machine
 - BOPP Labeling Machine / Sleeve Applicator
 - Batch Coding Machine
 - Water Chiller
6. Water Filtration Plant
 - Multigrade Sand Filter
 - Activated Carbon Filter
 - Micron Catridge Filter
 - Bag Filter
 - Iron / Flouride Removal Filter
 - Disc Filter
7. Softening Plant
8. Demineralisation Plant (D.M.Plant)
9. Swimming Pool Filtration and Accessories
10. Ultra Filtration Plant / Nano Filtration Plant
11. Waste Water Treatment Plant
 - Sewage Treatment Plant (STP)
 - Effluent Treatment Plant (ETP)





REVERSE OSMOSIS (RO) PLANT

Reverse Osmosis (RO) is a process of physical separation of dissolved solids and minerals present in water. This technology uses the principle of osmosis, wherein the mineral concentration of raw water is reduced by applying high pressure through a semi-permeable membrane. RO technology offers maximum flexibility to meet diverse requirements. Our customised software, helps customers gain the maximum 'RO Advantage', by helping to make the right selection. It gives the right solution, and reduced the investment cost. The production range starts from 100 LPH (Liter per hour) to 100 M3 per hour for 250 TDS to 45,000 TDS.

We design and manufacture the Reverse Osmosis Plant according to,

- Surface Water
- Well Water
- Ro Permeate
- Sea Water Open Intake
- Sea Water Well
- Waste Water

THE SALIENT FEATURES

- Low Operating Cost
- Highly Efficient Design
- Effective Semi Permeable Membranes with Long Durability
- Lesser Space for Installation
- Easy Maintenance
- Water Free from BOD, TSS or any Kind of Microorganisms.
- Low Power Consumption
- Modular Design

APPLICATION

- Pharmaceutical Companies
- Ceramic Industries
- Chemical Companies
- Dairy Industries
- Fishing Companies
- Food & Beverages
- Hospitals
- Hotels
- Pulp & Paper Industries
- Textile Industries





DM PLANT

Demineralisation plant offered by us is based on cost effective ion technology with counter current regeneration. DM Plant is the process of removing mineral salts from water by using the ion exchange process. The DM plants are loaded with highly efficient CATION and ANION exchanger and are also loaded with degasification system to remove every trace of minerals from the system.

FREEION ENGINEERING Offers Standard DM Plants with FRP / Mild Steel Rubber Lining & SS 316 L (Quartz Lined) construction.

APPLICATION

Demineralised water is suitable for Distilled Water, Boilers Feed Water, Beverages, Fertilizer, Pharmaceuticals, Battery Water, Chemical Industries, Induction Furnace, Steel Plant, Food Processing, Electro Plating, Electronics, Hospital, Laboratories, Automobile, Textiles, Potable Water.

ADVANTAGES

- Easy to Install & Operate
- User Friendly, Low Maintenance
- Efficient Design to Suit Varied Requirements
- Counter-current Design for Better Efficiency and Lower Operating Cost
- Simpler Distribution and Collection Systems
- Complete Assembly with Backwash & Regeneration Equipment
- Compact Upflow Design
- Flexible Layout to Suit Site Conditions
- Wide Range : 500lph-100m³/hr.



SOFTENING PLANT

FREEION ENGINEERING softening plant is designed to remove calcium and magnesium ions which cause the hardness of water. The hardness in raw water gets exchanged with sodium ions in the sodium based cationic resin bed thus giving real soft water. Softening plant is designed to cater to the requirement of scale prevention of utility / plumbing fixtures from total hardness.

- Softeners are available in MS, MSRL, FRP, S.S. operating in Manual / Auto mode.

APPLICATION

- Boiler Feed Water
- Heat Exchangers and Chillers
- Cooling Tower Spray
- Pond Textiles Processing
- Beverage Manufacturing





WATER FILTRATION SYSTEM

FREEION ENGINEERING design unique filtration system to improve the treated water quality by removing physical impurities, organic compounds, colour, odor, iron, manganese, turbidity etc.

Filtration is the process by which, physical impurities, suspended particles are filtered, and different methods are used for filtration like,

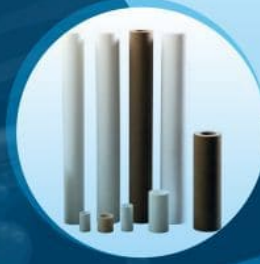
- Multigrade Sand Filter
- Activated Carbon Filter
- Micron Cartridge Filter
- Bag Filter
- Iron / Fluoride Removal Filter
- Disc Filter

SALIENT FEATURES

- High Filtration Efficiencies
- Filter up to 0.5 Micron
- FRP, MSRL, MSFRP, MSEP & SS Vessel available
- Low Pressure Drop Across the Vessel
- Air Scouring Available for High Flow Pressure Vessel
- Manual, Semi-Automatic and Automatic Features are Provided

APPLICATIONS

- Cooling Water
- Treatment of Wastewater
- Production of Drinking Water
- Filtration in Swimming Pools
- Pre Filtration for Membrane Systems
- Filtration of Gray or Surface Water
- Potable Water Treatment
- Dairy and Food Products
- Irrigation and Farming





SWIMMING POOL FILTRATION SYSTEM

We bring swimming pool filter system, a swimming pool filter system that keeps the water of your swimming pool, hygienic, comfortable and enjoyable. We ensure that you receive the swimming pool filter system solution that works best in terms of quality, compliance and cost. All systems are built with an exclusive modular design that allows for quick and simple inspection and cleaning of cells. These system allow for simple "in field" removal and re-installation of individual components without having to call for the services of an electrician or plumber.



UNDER WATER LIGHT



SUCTION TROLLEY



SAND FILTER



SS LADDER



WATER TRANSFER PUMP





ULTRA FILTRATION PLANT

FREEION ENGINEERING offer ultra filtration plant, which is designed by using advanced technology this design is dependent on different flux rates, pump models, membrane types and inlet water quality, it gives the right solution.

Ultra filtration system is proposed in pretreatment and post treatment. ultra filtration work on cross flow filtration principle and designed operates at around 95% recoveries. Ultra filtration is a tangential flow, pressure driven filtration process that separates particles on the basis of their molecular size. Pore diameters of ultra filtration membranes are in the range of 0.001 to 0.02 micron. Solvents and species having a diameter smaller than the pore size of the membrane will pass through the membrane and emerge as ultra filtrate, known as permeate. Rejected species are progressively concentrated in the retained stream. Ultra filtration membranes are reusable and cleanable with standard chemicals.

FEATURES

- Compact unit with robust mild steel powder coated frame
- Range of models with capacities from 1.8m³/Hr. upto 100m³/Hr.
- Built in safety features to protect membranes from high pressure
- Fully assembled and tested before dispatch
- On-line device to monitor treated water quality

ADVANTAGES

- The most economical & efficient method of dissolved solids removal
- Easy to startup 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

APPLICATIONS

- Removal of virtually all particulate matter, suspended solids, bacteria, viruses, and pathogenic species from pharmaceutical and industrial process water
- Removal of colloidal material (non-reactive silica, iron, aluminum, etc.)
- Removal of high molecular weight organic. Therefore, the product stream will contain water, ionic species, and low molecular weight material, whereas colloidal matter, particles, bacteria, viruses and pathogenic species will be rejected by the membrane
- Pretreatment for Mineral water plants
- High purity water for hospital for use in dialysis units
- As a retrofit to demineralisation plants in industries to reduce regeneration chemicals





WASTEWATER TREATMENT PLANT

A large quantity of industrial and commercial effluents causes pollution in our environment. Our plants handle these effluents in most to make our environment safe and healthy. To keep our environment safe, we offer innovative Wastewater Treatment Plants to remove the pollution effluents with economical operation and quality discharge to meet the stringent pollution control norms. It mainly depends upon the type of effluent when various processes are developed for the cost effective treatment. The technological solutions are available after complete research and trial run at our pilot plants.

FREEION ENGINEERING offers a wide range of wastewater treatment plants in RCC constructed designs for commercial and residential buildings as well as Mild Steel FRP Lined and Fiber constructed tanks for easy installation and commissioning. wastewater treatment systems are available from 5 m³/day to 500 m³/day and more... Packaged units come in standard modules with capacities ranging from 5 m³/day to 200 m³/day.

We are engaged in offering our clients optimum quality made wastewater treatment plants, which have high demand in the market. These plants are precision engineered using high grade material in compliance with the industry set norms.

WASTEWATER TREATMENT TECHNOLOGIES

- Physio-Chemical Treatment
- Biological Treatment
- Aerobic Treatment Plants
- Activated Sludge Treatment
- Extended Aeration System
- Diffused Aeration System
- Membrane Technologies

APPLICATION OF SEWAGE TREATMENT PLANT

- Golf & Country Clubs
- Holiday Camps
- National Parks
- Hotels & Resorts
- Service Stations
- Military Camps
- Institutions
- Restaurants
- Housing Complexes

APPLICATION OF EFFLUENT TREATMENT PLANT

- Dairy Industries
- Food and Food Processing Industries
- Pharmaceutical Industries
- Dye and Pigment Manufacturing Industries
- Textile Industries
- Petrochemical Industries
- Sugar and Distilleries
- Fertilizer Manufacturing Industries





20 LTR. JAR RINSING, FILLING & CAPPING MACHINE

120 / 240 Jar per hour

- Power : 3 Phase
- Washing Stage : 2 Stages
- Filling Head : 2 Head
- Filling Range : 10 and 20 Ltr. Jar



JAR WASHING MACHINE

- Complete Unit in Stainless Steel 304
- SS Tank for Holding
- Jar Washing Unit with Hot & Cold Water
- Hot Water Washes with Industrial Heater & Tank Provision
- SS Pump Ensure to Proper Wash
- Time Base Washing
- No. of Head : 2 Washing Head
- Power : 1 Phase / 3 Phase
- AC Heater : 2 Kw.
- Washing Range : 10ltr to 20ltr Jars





MINERAL WATER TURNKEY PROJECT

The demand for mineral water is increasing at a rapid rate, as people become more health conscious and take precautions against water borne diseases. Bottled mineral water provides easy transportability and assured water quality.

With intention the best quality of mineral water, we design and install turnkey system of mineral water plants incorporating the equipments & components. We offer a single convenient source for all system accessories, Including pre treatment, filtration, Disinfection and packaging of water.

THE PROJECT INVOLVES MACHINERY :

- Mineral Water Plant
- Jar Washing / Filling Machine.
- Automatic Jar Rinsing, Filling & Capping Machine
- Semi / Automatic Pet Blow Molding Machine
- Automatic Bottle Rinsing, Filling & Capping Machine
- Automatic Pouch Packing Machine
- Cup Filing Machine
- Semi / Automatic Group Packing Machine
- BOPP Labeling Machine / Sleeve Applicator
- Batch Coding Machine
- Water Chiller

PRIME REASONS MAKES IT PREMIUM BUSINESS :

LONG STANDING BUSINESS	"Never Ending Demand", essentiality has made it long term business.
HIGHEST FPROFITIBILITY	Best in consumable industries. INVESTMENT:From 1 lac - 1 cr. any type of business class / investor can afford.
GRAND FOR BUSINESS	Government facilities like subsidy 35% to 50% and bank loan up to 85%.
LOW PAY BACK PERIOD	You may get your money back in 06-24 months.
STATUS BUSINESS	Give you immese response with many.





Automatic Bottle Rinsing, Filling & Capping Machine

30/40/60/90/120 Bottle per minute

- In side Rinsing, Filling & Capping System
- In-feed Air Conveyor and Out-feed Slate Conveyor
- Cap Hoper with Elevator
- Power : 3 Phase
- Filling Range : 200ml. to 2 Ltr.



MINERAL WATER POUCH PACKING MACHINE

2800-3000 Pouch per hour

- Power : 1 / 3 Phase (Optional)
- Structure : M.S.
- Covering : S.S.
- Suitable Pouch Width : 150 mm
- Filling Range : 50 - 500 ml.
- Filling System : Digital Timer Base
- Packing Material : Multilayer Low Density Polyethylene
- Film Width : 325 mm



PET BLOW MOLDING MACHINE

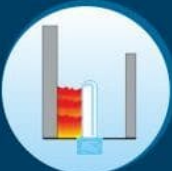
FULLY-AUTOMATIC PET BLOW MOLDING MACHINE

- Automatic Perform Loader with Hopper
- Max. Product Volume 2 Liters
- Neck Size : 20-45mm Double Cavity
- Speed of Production : 2200 Bottles in 2 Cavity / 4200 Bottles in 4 Cavity



2 / 4 Cavity Machine

Preform heating



Introducing preform into the mould and closing unit



Inserting the stretching



Stretching and pre-blowing



Final bottle-blowing



Mould opening



Discharge bottle from the mould



SEMI-AUTOMATIC PET BLOW MOLDING MACHINE

- Can Operate easily Without Any Special Training and Safety Operation
- Max. Product Volume 2 Liters
- Neck Size : 20-45mm 2 Cavity up to 120mm Single Cavity
- Speed of Production : 1200 Bottles per hour

2 Cavity Auto Drop Machine





BOPP LABELER

60/90/120 Bottle per minute

- Type : BOPP
- Bottle Diameter: 50-105mm
- Power : 3 Phase
- Structure : Stainless Steel
- Speed : Variable (AC. Drive)



BATCH CODING MACHINE

- Standered Usb with Logo and Backup Features
- 100 Massage Storage Capacity
- LCD with Membrane Keyboard
- Printing Head : 1
- Ink Type : Dye Based
- Speed : 162.5m/min
- Core Life : Up to 6000 hours

GROUP PACKING MACHINE

- Type : SS Belt Type
- Conveyor : SS Mesh
- Power : 3 Phase
- Structure : M.S. Powder Coated
- Heating Chamber Size : 42" x 22" x 16"
- Speed : Variable (AC. Drive)



WATER CHILLER

2 / 3 / 5 / 10 Ton Compressor

- Body : MS Powder Coated Structure
- Compressor : Kirloskar Make Compressor
- Condenser : Fence Type
- Refrigerant : R-22.
- Power : 1 Phase / 3 Phase
- Starter : Starter with All Safety and Protections



AUTOMATIC GLASS/CUP FILLING & FOIL SEALING MACHINE

2 / 4 Cavity Machine (200ml-300ml)

- Cup Feeder : Manual / Automatic (Optional)
- Cup Size : As Per Final Glass Sample Or 75mm
- Filling Range : 100ml - 300ml
(Volumetric Piston Filler)
- Foil Cutting System : Lip Type
- Filling System : Gravimetric (Digital Timer Base)
- Laminated Roll : 205mm. (Width) Photocell
Mark 95 to 100mm



INDUSTRIES WE SERVE

FREEION ENGINEERING's capabilities are utilized by major industrial undertakings, like

- Agricultural Industry
- Automobile Industry
- Biotechnology Industry
- Chemical & Fertilizer Industry
- Construction Industry
- Distillery & Brewery Industry
- Dairy Industry
- Electronic Industry
- Electroplating Industry
- Engineering Industry
- Food & Beverages Industry
- Fisheries Industry
- Food Processing Industry
- Hotel/Restaurant Industry
- Hospitals
- Lather Industry
- Metal Plant
- Municipality
- Paint Industry
- Pharmaceutical Industry
- Paper & Pulp Industry
- Petrochemical Industries
- Power Plant
- Plastic Industry
- Rubber Industry
- Sugar Industry
- Textile Industry
- Tannery Industry



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