We are in manufacturing, supplying and exporting premium quality RO membrane. Sourced from our trusted vendors in the branded name of Melbourn, high quality raw materials are used to design this membrane. Stringent quality control is maintained in the entire manufacturing process to ensure end product meets with international quality standards. Hatco Systems is India’s first company to supply high quality reverse osmosis membrane at market leading price. Based on our clients’ demands, we supply various type of RO membrane.

We supply various type of membrane: 50 gpd, 75 gpd, 80 gpd, 100 gpd, 300 gpd, 400 gpd, 4” and 8” industrial membrane.

**Key features of our Reverse Osmosis membrane:**
- Better self life
- High salt rejection up to 98% TDS up to 2000 tds
- Ro membrane sheet manufacture by USA leading brand
- Ro membrane rolled by KOREAN machine for better performance
- In house testing facility

We are engaged in manufacturing, exporting and supplying excellent quality of Booster Pump, in India.

Booster Pump 24/36V Suited for water filter Purifiers for Dolphin, Kent, Grand, P-Top, Compaq, Natural and many RO models can be used in any purifier Model – Counter Top, Desk Top, Stand Mounted, Wall Hanging, Under Sink.

**Advantage of Hatco Systems pump:-**
- Equipped With High Power DC Motor With Low Noise, Low Vibration
- Low Power Dissipation, High Efficiency
- Resistance To Acids, Alkalis And Adhesion & Easily Fixed And Removed
- Excellent Self-Suction Capability, High Precision Ball Bearings
- Totally Inspection Control In Production Process For Electrical, Sealing And Water System

**Advantage of Hatco Systems pump:-**
- Most Efficient Performing Booster Pump
- Less Vibration
- Long Life with Constant Pressure and Flow
- Very Easily Operated At The Time Of Installation And Service

Titan Valves based in the capital of Tamil Nadu – Chennai. We are operating since 2007 specialized in study and manufacturing of ceramic control valves. We have got invention patents and we have also applied for PCT global patent. We have a team of dedicated and trusted employees.
Hatco Systems micro bubble generator is designed to pressurize water with air at 78 psig. The supply feed pipe is offset and positioned tangentially to the tube. Water pumped into the tube develops a rotating action. The combination of pressure and agitation causes air to dissolve into the water. A vortex forms at the central axis of the tube. Un-dissolved air collects at the vortex and is removed from the tube through a course air bleed off line. The flow rate through the micro bubble generator is determined by the pressure drop between two gauges located on the inlet feed pipe line to the tube and the other located at the end of AMT tube. Normal operating differential pressure is approximately 7 psig.

**Features**
- Converts a pressure head to a velocity head.
- Flows can be modified.
- Operator can control the range of bubble sizes.
- No moving parts.
- Adjustable air to water ratios.
- Even control of air for uniform bubble size.
- Coarse bleed off.
- Skid mounted tube, pump(s), electrical, trim, piping, air regulator, flow meter, pre-packaged ready for operation.

**Benefits**
- Manufactured in different sizes to deliver flows from 1 to 3000 gpm.
- Units can also be installed in series for unlimited flows.
- Operator exercises control over creation of micro-bubbles of specific size for the application enhancing performance.
- Improves flotation and float mat in any type of cell.
- Improves TSS removal efficiencies.
- Reduces city sewer surcharge and chemical costs.
- Limited engineering costs for retrofits.
- User friendly.

Hatco Systems cyclone filter housings are one of the most innovative, low maintenance solutions for liquid filtration available. Constructed entirely from 316L stainless steel, they offer excellent corrosion resistance for the most demanding applications.

We supply various type of membrane: 50 gpd, 75 gpd, 80 gpd, 100 gpd, 300 gpd, 400 gpd, 4” and 8” industrial membrane.

**High Speed Cyclone Effect**

The contaminated sample initially enters an angled inlet port, creating a cyclone effect like a tornado in which the contaminants are filtered via a filter disc. Any particulates are blocked by the filter disc and carried to the bypass port at the bottom of the housing. The clean sample is then able to pass through the sintered stainless steel filter disc to the sample outlet port.

Due to this cyclonic effect, the filter disc is kept clean for a long period of time – extending the period required between service intervals in comparison to standard filters. Even when a service is due, the procedure is incredibly quick thanks to the ‘threaded cap’ design of the housing, allowing for easy access to – and replacement of – the filter disc.

**Stainless Steel Filter Discs**

Our stainless steel filter discs are ultra-durable solutions for particulate filtration, especially in liquid applications. Several layers of 316 mesh are sintered together to form an integrated porous filter, with coarse mesh providing support and protection to the finer, central mesh.

316L stainless steel filter discs are stocked in grades 2, 5, 10, 20, 40, 100, and 200 micron to suit all cyclone filter applications.

Disk filters are a cross between a screen filter and a media filter, with many of the advantages of both. Disk filters are good at removing both particulates, like sand, and organic matter. A disk filter consists of a stack of round disks. The face of each disk is covered with various sized small bumps. A close up view of the bumps reveals that each has a sharp point on the top of it, somewhat like a tiny pyramid.

These bumps are very small, thus a typical disk looks a lot like the old vinyl 45 RPM records! Because of the bumps, the disks have tiny spaces between them when stacked together. The water is forced between the disks, and the particulates are filtered out because they won’t fit through these gaps. The organics are snagged by the sharp points on the bumps. For automatic cleaning of the filter the disks are separated from each other which frees the debris to be flushed out through a flush outlet. For less expensive disk filters you must remove the disks and hose them off.
Hatco Systems Belt Skimmers are developed with a variable speed drive to provide an economical, corrosion-free, wide belt skimmer for central coolant tanks, wastewater and water treatment applications with high collection rates! Use in applications where desired oil collection rate is not known, where incoming oil rate may change, or where oil is needed to be removed faster/slower at different times! Simply Turn Knob to Adjust Oil Lift Rate or to dial it in for best recovery.

**Benefits:**
- Economical Cost and Dependable Operation
- No Corrosion – All Stainless and Polymer Materials
- Std. Belt Lengths to 10 ft. – Can be made to 100 ft. down
- Handles Fluctuating Liquid Levels
- Takes Little Space & Easy to Install
- Furnished as a Complete System with Accessories

**Features:**
- Uses Belts – Polyurethane or Stainless, Uses One to Four Belts, Baldor Permanent Magnet Gearmotor, UHMW Bearing-Grade Polymer Scraper Blade.

Screen filters are probably the most common filters and in most cases the least expensive. Screen filters are excellent for removing hard particulates from water, such as sand. They are not so great at removing organic materials such as algae, mold, slime, and other unmentionables! These non-solid materials tend to embed themselves into the screen material where they are very difficult to remove. In other cases they simply slide through the holes in the screen by temporarily deforming their shape.

Screen filters are cleaned by flushing them with a stream of water or removing the screen and cleaning it by hand. Depending on the flush method used you will probably have to periodically hand clean the screen to remove garbage not removed by flushing. Several methods of flushing are common. The simplest is a flush outlet. The outlet is opened and it is hoped that the debris washes out of the flush outlet with the water! An improved variation on this is the directed-flow flush. Again a flush outlet is opened, but in this case the structure of the filter is designed so that the flush flow rushes over the face of the screen sweeping the debris along with it. Somewhat like hosing off a sidewalk with a strong stream of water. This is the most common method found in inexpensive filters. The most effective method of flushing is the backwash method, but these filters are typically more expensive. In this method the flush water is forced backwards through the screen for a very effective cleaning. This is accomplished by either using two filters side-by-side (the clean water from one is used to flush the other) or by “vacuuming” the screen with a small nozzle which is moved over the screen by a mechanism in the filter, “sucking” the debris off of it. (Although it is referred to as vacuuming it is really a form of backflush. The water is forced backwards through the screen by the water pressure in the system, not by a true vacuum.)

**OIL SKIMMER (BELT)**

**Jet Aerators**

**Biological Reaction**

Hatco, To provide the oxygen source for the biological reaction, a jet aeration manifold with multiple jet nozzle assemblies is connected to a pump and a blower. Each jet has a primary mixing nozzle and an outer secondary nozzle. The tank contents are re-circulated by the pump through the primary mixing nozzle. Low pressure air is mixed with the liquid in the outer secondary nozzle creating fine bubbles. By turning off the blower connected to the airline, Anoxic mixing can be achieved with the same equipment to promote biological nutrient removal. No separate mixer is needed.

**Energy Efficient**

Jets have high oxygen transfer and higher alpha values compared to other aeration devices. The design alpha for Hatco jet system is 0.9 with successful installations. Performance data has demonstrated alpha values above 1 in the use of some industrial wastewaters. Jet nozzle gassing rates can vary significantly without major changes in oxygen transfer efficiency. Jets also provide energy efficient off-bottom solids suspension.

**High Velocity**

Tank liquid is pumped through the liquid line and through the inner nozzle. High velocity is created by the inner nozzle forming a jet plume. Compressed air is forced through the air line into the air transfer duct and then the outer nozzle. The high velocity jet plume from the inner nozzle shears the air in the outer nozzle creating fine bubbles. These bubbles are carried by the jet plume into the tank liquid. As the jet plume disperses and velocity slows. The buoyant force of the bubble causes the bubbles to rise.
Hatco Systems uses a series of controlled complex modulating high frequency waveform that ineffective the bonding ability of minerals that are contained in our water. This field effectively control & prevent different size molecules likely to form scale & to break the bonds between molecules & the water. This results the break down of large mineral crystals into tiny mineral particles & then prevent them from reacting with other minerals or bonding to any surface to from scales. The process is so effective that existing scales are progressively broken down & flushed away in due course of time. The conditioned and treated liquid ions results in non-corrosive & best solvent water. It also helps the plants to grow well & healthy.

Electro-magnetic treatment is based on the principle of creating an Oscillating field of energy with the use of high frequency radio or square waves. The device produce a unique square wave current that sweeps all the frequency responses from 1000 to 15000 HZ at a rate of 10 times a second. When the strength of the oscillating field varies with time and changes direction an induced current is produced inside the pipe line, this is also known as FARADAY’S law of induction.

In Simple Language:-

As soon as the water pass through the device or softener, a certain in type of electro-magnetic field in developed in the machine and as a result of that two types of processes are done.

1. Breaking Process :

During this process high mineral clusters of any size are being broken down into small and tiny particles and scattered.

E.g. If any of the mineral ion in the water is in size of 40 micron, then it will be broken down and converted into 10 tiny parts of 4 micron and making them more bion-available.

2. Transforming Process :

This process is very important in water. When minerals are being broken down and converted in to small and tiny particles, because of that nature of water molecules to travel together and sticking to each other or developing cluster are being ruined and transformed in to 100% non-sticking nature. Like that they cannot travel together or develop any cluster or layer in to water. Nature of water is changed. So with the help of join process of this device hard water is turned into “Best Solvent” compared to non – treated water. This is the only technology which does not remove useful and essential minerals/nutrient ions from water, but treat them and make them more bion-available.

Hatco Supplies a wide range scale busters, To prevent scaling of any water. We are among the most trusted companies for providing Scale Buster to the clients. Our offered product Ion Scale Buster is stringently checked by the quality auditors on well defined parameters so as to make sure a hassle free operation and performance for long period of time and is widely appreciated by our esteemed clients.

Features

★ High accuracy
★ Robust construction
★ Easy control systems

Product Description:

Hatco technology has bee utilized for environmentally friendly, water conditioning by the residential, commercial and industrial markets for more than 15 years. The technology has been used by some of the world’s largest commercial and industrial companies to treat scaling, corrosion, and other water challenges. Over 300,000 units have been sold and installed worldwide.

Scale and general corrosion form on equipment surface and restrict water flow, clog systems and reduce system efficiency resulting in costly equipment down time and increased maintenance costs. Using chemicals to treat these conditions results in high chemical disposal costs, pollution of the environment and related health and safety issues.
EJECTOR

**Ideal for plants with highly polluted waste water**

In its construction form the ejector for the aeration process corresponds to that of an ejector. Because organically polluted wastewater requires a high amount of oxygen and also because of the increasing height of modern biological waste water cleaning plants it is energetically more efficient to pre-compress the air mechanically to the hydrostatic pressure prevailing at the installation point of the ejector and to supply it so to the suction connection.

This waiving of an appreciable pressure in the ejector reduces the necessary motive pressure. At the same time, more favourable mixing ratios (suction flow : motive flow) are achieved. Motive nozzles of Hatco ejectors are equipped with a non-clogging spiral. So the motive jet disperses the air already at a low motive pressure in a myriad of fine bubbles which are then mixed vigorously together with the motive flow in the mixing zone. This air/water mixture is injected into the aeration tank with a high turbulence. In this way the ejector guarantees optimum oxygen supply and a total intermixing of the tank contents. Even with a high biomass concentration in the waste water it is still possible to attain flow velocities which prevent deposits on the tank floor.

**Advantages of Hatco’s ejectors:**
- Maintenance-free – no moving elements
- High oxygen efficiency – Fine bubbles create large contact surfaces between air and water and high turbulence renews these contact surfaces.
- No deposits – The intensive jet flow directed towards the tank floor prevents deposits of biomass.
- Straightforward control of oxygen supply
- Non-clogging construction – The nozzle diameter defines the narrowest flow cross-section.
- No sealing problems – When the plant is inactive, water can enter the air pipeline without negative effects and when re-started, the ejector’s entraining effect expels any liquid in the pipe.
- Design acc. to requirements – Various sizes can be designed and adapted to requirements.

MINI DM PLANT

Portable or Mini DM water plant: The flow rate of mini DM plant is 50 – 80 litre per hour and space required for it is very compact. These plants have a wide range of applications in food and pharmaceutical industry, automobiles industry, hotels, clubs, residential complexes, laboratories and so on. The plants are available in competitive prices. A pre-validated and pre-mounted skid mounted solution is offered by mini DM water plant. Application areas are Chemicals, industries, battery top-up and laboratory and research centres.

DAF - DISSOLVED AIR FLOTATION

Hatco systems provides, Dissolved Air Flotation technology (DAF) has proven to be very successful as a pre-treatment step. Hatco’s DAF units stand out as the best in its field. To determine the unit application, several drivers will be taken into account to execute the unit in stainless steel, (super) duplex or concrete:em, not by a true vacuum.)

- Transporation
- Flexibility
- Footprint
- Water capacity.

For decades the Hatco Systems Dissolved Air flotation unit has been known as the most robust and best DAF unit available on the market.

However, in response to variations in industrial activity and customers’ requirements to quickly and efficiently relocate production facilities, Hatco has now redesigned their DAF concept. The result is an even more efficient system than before.

The Hatco’s Dissolved Air Flotation (DAF) system is based on innovative and intelligent aeration system which forms fine air bubbles for the separation of particles.

**Applications**
- Drinking water intake;
- Wastewater treatment
- Desalination
- Process water production
- Industrial zones.
Hatco are engaged in offering wide array of Florides Arsenic Removal Filters. Our offered products are used to detect and remove arsenic and other impurities from water. Arsenic is found to be contaminated many water supplies used for drinking and farming. We are appreciated among the customers for offering products at industry leading prices.

Features:

**Advantages of Hatco’s ejectors:**

- High demand
- Effective
- Technically advanced

Through our experience we know that in many cases the configuration of the future process plant can already be optimised through a standardised preliminary examination prior to installation. This will save you the cost for investment as well as for future operation. You can be assured of the quality of our service before placing your order.

**Advantages of a Pilot Plant**

- Easy transportation and fast installation
- Very small footprint
- Optimum dimensions for a large-scale plant
- Optimisation prior to investment
- Proof of performance capacity prior to investing in large scale plant
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