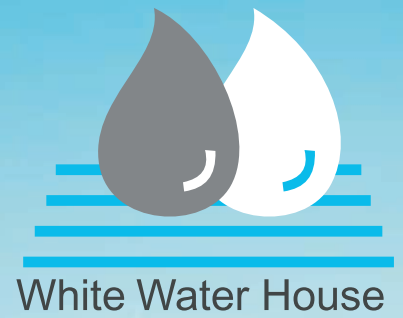


VAM SOFT-PURE[®]
100% Water Solutions



VAM ENGINEERING & CONST. CO.
AN ISO 9001 : 2015-Certified Company

Certificate



This is to certify that the
QUALITY MANAGEMENT SYSTEM
of

M/S VAM ENGINEERING & CONST. CO.

D-34, Sector - 7, Industrial Area, Noida -201301 (U.P.), India

has been assessed and found to be in conformance to the requirements of

ISO 9001:2015

This certificate is valid for the following activity:

Supply & Maintenance of Water & Waste Water Treatment Plants
Including R.O. Systems, Softener, D.M. Plants & E.T.P. and Spares;
General Order Suppliers; Civil Work & Horticulture

Certificate No.: DI-100603

Date of initial registration	28-06-2010
Date of this certificate	06-06-2018
Certificate Expiry	27-06-2019
Recertification Due	27-06-2019


Auth Sign

Registration is subject to the system being continually maintained to the above standard under regular surveillance.
If surveillance not take place when required, registration shall be removed.

Indraprastha SystemCert Pvt. Ltd.

Accredited by DAC, A Member of International Accreditation Forum

For updated information of Certification, visit- www.ispcert.com,
or E Mail: info@ispcert.com, ispcert@gmail.com

201, Jana Tower-3, A-1, Janak Puri, New Delhi-110058, India,
Ph: +91 9990 477 631



CB-022-MS



Company Profile

We are a leading ISO 9001:2015 company providing cost effective & compact water & wastewater treatment solutions. Backed by team of technocrats who are serving water industry for decades and are capable of handling difficult problems with their wide experience.

The company has a long reference list of successfully working water & waste water treatment plants. With expertise in a wide spectrum of technologies in drinking water, process water, sewage and industrial effluent treatment, we provide very economical and effective solutions for industrial, institutional and residential sectors. Plant designed and manufactured by us meets international standards. We also provide all necessary support in terms of design services, testing facilities, O&M contracts, supply of spares and chemicals and training. Our design study actively engages the client to understand their requirements and problem areas.

We have helped many clients in meeting the statutory requirements of local Pollution Control Boards while also working on safe drinking water for human consumption on various projects namely paper , sugar , textile , rice mills, water bottling plants, housing societies, malls , schools , colleges , construction sites, etc.

We are committed to provide the best system designs, high quality equipment and matching post commissioning services to earn good will of our esteemed customers.



Waste Water Treatment Plants

- Effluent Treatment Plants.
- Sewage Treatment Plants.
- ETP & STP Plant Chemicals
- All spares & Consumables.

Water Treatment Plants

- Pressure Sand Filters.
- Activated Carbon Filters.
- Iron Removal Filters.
- Water Softening Plants.
- D.M Plants.
- Mix bed polishing unit.
- Ultra Violet Disinfection units.
- Reverse Osmosis Plants.
- Swimming pool filtration plants.
- Packaged Drinking water projects.



BAR SCREEN

For Removal of solid debris in sewage & effluent in coming channel
Available in different size as per requirement. MOC- MS & SS

Sewage Treatment Plants



Effluent Treatment Plants



R.O Process :

Most ground water available today has high salt content that corrodes plant equipment and damages health. Reverse osmosis is a membrane separation process for removing dissolved salts from a water. In order to use reverse osmosis as a water purification process, the feed water is pressurized on one side of a semi permeable membrane. The pressure must be high enough to exceed the osmotic pressure to cause reverse osmotic flow of water.

We design RO systems for water purification in beverages industry, bottled water, boiler water, wastewater recycling and many other applications.

Water Softening Process :

Water containing carbonates and bicarbonate salts cause scaling (salt deposits) and must be removed before use in a household or industry. A selective chemical treatment process known as ion-exchange is commonly used as it consumes low power. Here "hardness" causing ions are exchanged with sodium and chloride ions that are loosely bound to an ion-exchange resin or a zeolite (many zeolite minerals occur in nature, but specialized ones are often made artificially). In a similar way, positively-charged zeolites bind negatively-charged chloride ions (Cl), which get displaced by bicarbonate ions in the water. As the zeolites become converted to their Ca^{2+} and HCO_3 forms they gradually lose their effectiveness and must be regenerated. This is accomplished by passing a concentrated brine solution' though them, causing the above reaction to be reversed.

Through softeners we provide a low cost reliable water treatment system for most common usage.



Demineralization Process :

For complete salt removal that is required for high pressure boilers and some industrial applications of de-ionized water, we provide a combined cation and anion exchange cycle process . Water is first passed through acid cation resin column and then through strong basic anion resin column , across the cation exchange column all cation exchanges for hydrogen ion to give dilute acid effluent made up of sulphates , nitrates and chlorides. Upon passing through anion exchange column neutralization of acid feed occurs through the exchange of all anions of hydroxide to give ultra pure water.

Ultra Safe : Domestic Membrane Filter

Most water available from rivers, lakes and wells today is contaminated with pesticides, fertilizers chemicals, sewage and industrial pollution. For water that has dissolved salt level below 500 ppm (according to IS 10500) can be made ULTRA SAFE for drinking purpose with SBIEE's technology without wasting precious water.

- 100% Bacteria Removal
- 0% Water Wasting
- Odour & Colour Removal
- Toxic Heavy Metal Removal
- Pesticide Removal
- No/Low Power Consumption
- Ultra Low Maintenance
- Capacity 4-400 Persons

Sewage & Effluent Treatment Process :

We provide several treatment processes based on type and reuse of sewage or domestic wastewaters including :

- Activated sludge
- Extended Aeration
- Trickling Filters
- FAB process

And a carefully selected combination of these processes where needed in removing BOD from industrial wastewaters.

The plants are available in steel or concrete construction. Small plants for hotels, small societies, hospitals are available as compact packaged plant.

DM with MB Unit



Preliminary Treatment

Our designs provide superior Preliminary Treatment that is easy to operate and ensures trouble free plant operations :

- **Screening**- larger solids (plastics, rag, woody material) are removed first by mechanical screens.
- **Grit removal** -At the next preliminary stage, fine mineral matter (grit and sand), originating mainly from road runoff, is allowed to deposit in long channels or circular traps. It is important to control the flow velocity at peak flows to ensure good grit removal. Grease removal is also done with carefully designed baffle plates. Our designs provide balanced hydraulics making it very effective.

Primary Treatment Sedimentation

Depending on the size of the plant and nature of suspended solids, we provide primary clarification if necessary. This reduces power load on secondary biological treatment but primary clarification generates sludge that needs to be stabilized.

Secondary (biological) Treatment

Settled sewage then flows to an aerobic biological treatment stage where it comes into contact with micro-organisms which remove and oxidize most of the remaining organic pollutants. Air is supplied to enhance the bacterial action removing 90-99% organic waste.

Coarse to medium bubble Diffusers from made by us provide a rugged alternative to the plastic/ rubber membrane diffusers. Membrane diffusers get ruptured making entire aeration system inefficient. Our diffuser design is known to last decades without any need for maintenance or replacement.

Following biological treatment, the wastewater passes to final settlement tanks where most of the biological solids are deposited as sludge (secondary sludge) while the clarified effluent passes to the outfall pipe for discharge after an effective disinfection using chlorine, UV or hypochlorite.

Tertiary Treatment

For reuse of water in horticulture, cooling towers, toilet flushing , etc. water from secondary treatment we provide further treatment using sand and carbon filters. This brings clarity to water and removes smells from it. Additional stages of ion exchange and RO are also used depending on final application of treated water.

Sludge Treatment

For small treatment plants, sludge is completely stabilized using air before it can be put on drying beds. However in large plants sludge produced can provide useful biogas for use as fuel. We provide several sludge thickening and dewatering technologies like thickeners, filter press and centrifuge.

Water Treatment Plants



ETP



Water Softner



Mixed Bed Unit



PSF Plant



**Dual Media Filter
& Softner**



**Mixing Unit for
Carbonated/Soda Drinks**



DM Plant



Softner Plant



RO. Plant

Water Treatment Plants



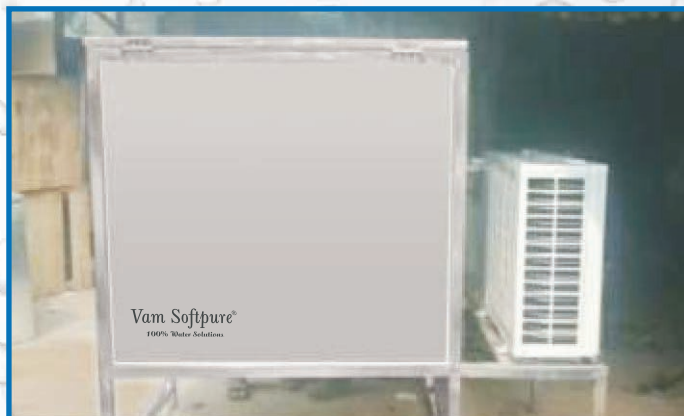
Home Pressure Pump



Water Softner



RO System



Water Chiller



RO System



Filter



ETP

Membrane 8" 4" - ETC.



PRODUCT DESCRIPTION

Reverse osmosis (RO) elements offer the highest quality water for small commercial systems.

- Membranes are available in a variety of sizes to meet a wide range of space requirements. CPA2 & BW 30-365 have been widely used in commercial Drinking Water Plant.
- Extra low energy element operate at the lowest pressure in the industry, resulting in lower energy costs and enabling system builders to use lower cost components.
- In addition to the highest quality water and the lowest energy costs, membranes also deliver savings by providing the industry's longest lasting and most reliable performance.

Vessels



Vessels are made from high performance composite material with filament winding, pressure vessels are tested for over 2,50,000 cycles and are 100% corrosion resistant. FRP windings provide strength to withstand pressures as high as 10 kg/cm² without any structural damage. Being immune to most chemicals, FRP vessels can be used practically for any water treatment application. They are available in different sizes with top and bottom opening.

FRP VESSELS - SS VESSELS - MS VESSELS.

Product Range:

From 6"x18" upto 63"x86" diameter, Flange option also available

Filter Cartridges



Offering a complete line of point-of-use cartridge sand housings to improve the taste and appearance of water, Range of sediment filters are manufactured on state-of-the-art production equipment to ensure the finest of filtration.

Product Range:

Spun, Wound, Pleated, Melt Blown cartridges with all micron ratings upto 0.2 micron, activated carbon cartridges & carbon blocks, Filter housings for all the above in all sizes & configurations.

- PP string wound, as the raw material, non-poisonous test less, in melt-sprayed, extruded, stretched and formed into tube like core which has the features of pressure-proof, corrosion-resistance, high precision and large flowrate.
- Length: 10"/20"/30"/40"
- Diameter: Outer diameter 63/110mm; Inner diameter 30mm/28mm
- Precision: 1/3/5/10/20/30/50/75/100mm
- Filter cartridges with different specification are available as required.

Filter Housing



Water filters and housings, our spun (true depth), pleated, carbon, bag and specialist filters will hold more sediment/ chemicals, maintain your water pressure for longer and thus last longer than most filters on the market. Reducing the time and hassle spent changing water filters. Our filters and housings come in a comprehensive range of sizes from 10" to 40", 0.045 micron upwards.

Polyelectrolite



We supply high quality anionic polyacrylamide, polyelectrolyte with different grades for water treatment mining paper application, oil field and de sedimentation etc

R.O. Chemical



Powerful enzyme-based additive for cleaning-in place, cleaning by soaking and for the cleaning of the membrane separation process.

Bleach Powder



USAGE : In the application of heavy dust detergent, metal detergent and various kinds of pulp washing of heavy alkaline ingredients, also as the oil absorption agent and the stable agent of H₂O₂ in the dyeing process.

Water Softening Resins



Ion-Exchange resins used for domestic and industrial water softening, demineralization, dealkalization and other chemical processes. The range of Ion-Exchange cation and anion resins provide higher operating capacities and outstanding physical, chemical and thermal stability. With faster kinetics and exchange capacity, these resins are available on nominal prices.

Antiscalants



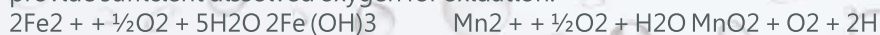
A complete range of Reverse Osmosis Chemicals that result in sustained performance of RO plants for a longer time reducing unscheduled shutdowns and cleaning costs. They disperse silt, and colloidal particles, keeping the membrane surface clean.

PRODUCT RANGE:

Antiscalant, Inorganic or Organic Cleaning Chemicals & Biocides

Manganese Dioxide (MnO₂)

Process of natural oxidation of iron and manganese is very slow. Requirement in Industries call for rapid oxidation MnO₂ is used as catalyst in contact filter for rapid oxidation of dissolved iron and manganese, which are present in the form of ferrous and manganous salts. Dissolved oxygen oxidizes these salts to insoluble ferric and manganese salts. pH of incoming water has to be corrected to around 9 for ferrous salts and 9 to 10.5 for manganous salts. Air is injected into inlet water to provide sufficient dissolved oxygen for oxidation.



Applications:

- Catalyst for oxidation of dissolved ferrous & manganous salts.
- Drying agent for paints and varnishes
- Manufacture of dry batteries
- For imparting brown glaze to earthenware and tiles.



Filter Media/Activated Carbon

- It is a crystal formed by the volcanic eruption.
- It has well-developed gap, strong adsorption which is an inorganic substance removal agent.
- In water treatment, it can also exchange with others balance weight of metal ions in order to reduce the hardness of water.
- In addition, it also has the features with large area and strong internal electrostatic, which can make you water quality achieve drinking water quality.



DOMESTIC RO COMPONENTS



Water Cooler



Water Treatment Spares Part



Multistage Inline Pump



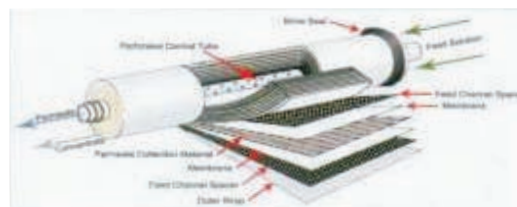
FRP VESSELS



Dispensor



UV System



Membrane

