

# *Pursuit for a Cleaner Environment*



# ABOUT US

Established in 1975, Al Ansari is a leader in Water purification technology for industrial and municipal market with focus on desalination, waste water treatment and service support.

The company is headquarter in Oman, has offices in Dubai and India. Al Ansari has best integrated solution provider supported by various well known OEM's in the world.

We are uniquely positioned to offer our clients complete integrated solutions through our vast depth and breadth of technology offerings with self-reliant team of versatile and experienced engineers possessing in house capability to integrate EPC based user specific and case specific solutions.

Al Ansari Trading Enterprise LLC is under the Flagship Company of Al Ansari Group. The Group possesses expertise in Infrastructure Projects, Water and Waste Water Projects, Civil and Building Construction, Electromechanical works, Landscaping and Irrigation as well as marketing of several lead products in these respective areas. We are certified with ISO 9001:2008, ISO 14001:2004 and OHSAS 18001:2007 in the above referred business areas.

We are one of the few companies in Oman having strength to provide both Water and Waste Water treatment Plants, where we have done extensive work with leading Government Organizations as Excellent Grade Contractor like Public Authority of Electricity and Water, Ministry of Regional Municipalities Environment and Waste Resources, Royal Court Affairs, Ministry of Defense Engineering Services (MODES), Petroleum Development Oman and Haya Water to name a few.

As a result of this involvement, Al Ansari has acquired technical expertise, experience and resources to offer all relevant technical services in Water and Wastewater Treatment. The group derives its strength from its people, who are top professionals in their field, and dedicated to quality and performance.

## UNMATCHED TECHNOLOGY PORTFOLIO

- Domestic/ Industrial Water Treatment Plant
- RO Technology based Sea Water/Brackish Water Desalination Plants
- Water and Wastewater Pumping Stations
- Vacuum Sewerage Systems
- Chlorination System – Gas/Liquid
- Fully/Semi-automatic Grey water Treatment system
- Mechanical Sludge Dewatering Units
- Manual / Automatic Pressure Sand Filter
- Chemical Dosing skids
- Storage Tanks

## WIDE-RANGE OF CAPABILITY

- Engineered System
- Turnkey/EPC/Design-Build
- Standard Products
- Water Management Solution and Services
- Contract Operations (O&M)



## WATER TREATMENT PLANT

Industrial process used to make water more acceptable for a desired end-user. These treatments basically include potable water, industrial water and pharmaceutical industrial requirements. The process involved in treating water from drinking purpose may be solids separation using physical process such as settling, filtration and membrane separation process.

### REVERSE OSMOSIS (RO)

Reverse Osmosis (RO) uses a semi-permeable spiral wound element to remove up to 99% of Total dissolved solids (TDS) and bacteria from the feed water source. A high pressure feed pump forces raw water into thin film membrane layers thus allowing the permeate product water to collect in the center tube of the RO element. Water containing impurities and salts remain on the outside of the RO element and are rejected on the opposite side of the feed water inlet.

The sizing of the RO system will greatly vary based upon the concentration of dissolved solids in the feed water. Systems can be provided with single pass or dual pass depending on water quality requirement.

### BRACKISH WATER RO PLANT

RO plant designed to produce potable water from low TDS water like rivers, bore wells etc. These unit are containerized/skid mounted units ready to install at site.

Capacity Range:	50 – 1000 cum/day
Feed Designed TDS:	10,000
Permeate TDS:	< 500

### SEA WATER RO PLANT

RO plant designed to produce potable water from high TDS water like Sea water which may be Sea shore bore wells, open intake pipe lines etc. These are basically containerized/Skid mounted units ready to install at site.

Capacity Range:	100 – 1000 cum/day
Feed Designed TDS:	45,000
Permeate TDS:	< 500







## WASTE WATER TREATMENT

Waste Water treatment involves treatment of domestic sewage, industrial effluent by the removal of contaminants from domestic waste water and Industrial effluent. The treatment of waste water treatment consists of a combination of physical, chemical, and biological processes and operations to remove solids, organic matter.



Sewage generated from residential and industrial establishment is treated to make it more suitable for discharge or reuse. The advance method of treatments has made it possible to re-use waste water effluent for various applications. It basically comprises of various treatment stages:

### EFFLUENT TREATMENT PLANT

Effluent treatment process depending on the type of treatment required, it basically consists of Coagulation, Flocculation, Sedimentation, Filtration, Chlorination and Softening. The water treated is utilized for various low end application and industrial use. Effluents generated from industries are treated based on the quality of effluent and type of treatment required. This includes treatment process as mentioned below:

**Primary Treatment** - Primary treatment removes the materials that can be easily collected from the raw waste water and disposed of like

- Removal of large objects from influent.
- Sand and grit removal
- Sedimentation
- Oil Removal

**Secondary Treatment** - Secondary treatment is designed to substantially degrade the biological content of the sewage such as are derived from human waste, food waste, soaps and detergent.

- Activated sludge
- Surface-aerated basins
- Fluidized bed reactors
- MBR (Membrane Bio Reactor)
- Oxidation Ditch
- SBR ( Sequential Batch Reactor)

**Tertiary Treatment** - Tertiary treatment provides a final stage to raise the effluent quality before it is discharged to the receiving environment (sea, river, lake, ground, etc.).

- Ultra filtration
- Media Filtration
- Nitrogen removal
- Disinfection

### Treated Water Application:

- Suitable for Irrigation and Gardening.
- Suitable for flushing
- Suitable for low end application like boilers and cooling towers.

# PRODUCTS

## MEDIA FILTERS

A water filter is used to remove suspended solids or turbidity from the water. These filters are used as pretreatment units and are located in front of demineralizer trains, reverse osmosis units, softeners, etc. By removing this debris in the water, it prevents the downstream equipment from being plugged up.

Al Ansari Filtration units offer a wide range of sizes, materials of construction and configurations to meet all of your filtration needs and are also available as standalone units as per the requirements.

**Application:** • Suspended Solids Reduction • Particulate Removal ➤ Capacity – 3.5 - 65 Cum/hr

## GREY WATER TREATMENT SYSTEM

Grey water basically includes water generated from soap wash, food waste from the garbage disposal and dish washer, the leftover liquids from the wash basins.

The scheme utilized is a packaged skid mounted system with a special feature utilising sand bed filters and Activated Carbon filters followed by chlorination and pH correction system.

**Application:** • Ambulation Systems • Kitchen and domestic waste water ➤ Capacity: 4 – 16 cum/hr

## HYDRO PRESSURE BOOSTING SYSTEM

Hydro-plus pressure boosting System are extensively used for potable water rendering outstanding importance in water supply in the residential and office building, hotels, hospitals and commercial centers.

**Application:** • Residential Buildings • Hotels, Hospitals, industrial applications

## CHEMICAL DOSING SKIDS

Chemical dosing skids are designed and manufactured to meet individual requirements and are both accurate and durable for all industrial applications. The dosing system designed to pump/inject accurate controlled volumes of chemicals additives into process system such as boiler feed, effluent treatment, RO Units, chemical feed, steam generators, chemical injection.

**Application:** • Water and Waste water Industry • Oil and gas • Other important Industry where controlled chemical dosing is required.





## OPERATION & MAINTENANCE

Al Ansari team draws on years of experience to provide 'localized' service to its valuable customers. We understand the criticality of plant operations and also the need to be fully capable and equipped to address the continuously evolving technology.

Our Operation & Maintenance service is guided by the specified needs of the customer, and Al Ansari works closely with the client's facility Management team to identify goals and create an appropriate O&M plan to achieve the desired results.



### TOTAL FACILITY MANAGEMENT

Al Ansari has the required expertise to provide Operation & Maintenance for the Total Facility.

- Al Ansari can implement the best Operating practices based on its vast data bank, to provide effective O&M services.
- With Al Ansari's specialist manpower, and years of experience, client facility can realize improved availability and reliability, giving them the competitive edge.
- Al Ansari's range of Operation & Maintenance Services cover
  - ◆ Daily Operation & Maintenance of the plant
  - ◆ Planned and break down maintenance services
  - ◆ Site documentation and procedures
  - ◆ Complete or expert staffing
  - ◆ Environmental health and Safety programs
  - ◆ Comprehensive training

### OPERATION & MAINTENANCE OFFERINGS

Operation & Maintenance Service is a well-defined business offering at Al Ansari, and the 'designed for the customer' models vary from

- Comprehensive O&M with staffing, Spares, Chemicals & Maintenance
- Specially designed Operation or Maintenance programs with Expert manpower
- Value added O&M module with defined fixed and Variable pricing models

### SERVICE OFFERED

- AMC (Annual Maintenance Contracts)
- Planned visits for inspection and preventive maintenance
- Prompt and expert trouble shooting by our trained engineers to minimize down time
- Plant performance audits
- Quick response to emerge break down requests
- Value added guidance on Plant Maintenance and Operations
- Comprehensive Plant Health checkup audits
- Genuine Spare Parts and Consumables to augment production
- Valves, instruments, header and laterals, strainers, traps etc

### RETROFIT & AUGUMENTATION

- System up-gradation and modification for improved efficiency and optimum operations
- Well planned rehabilitation with minimum downtime
- HMI upgrades and automation for critical plant operations



Al Ansari

[www.alansarioman.com](http://www.alansarioman.com)

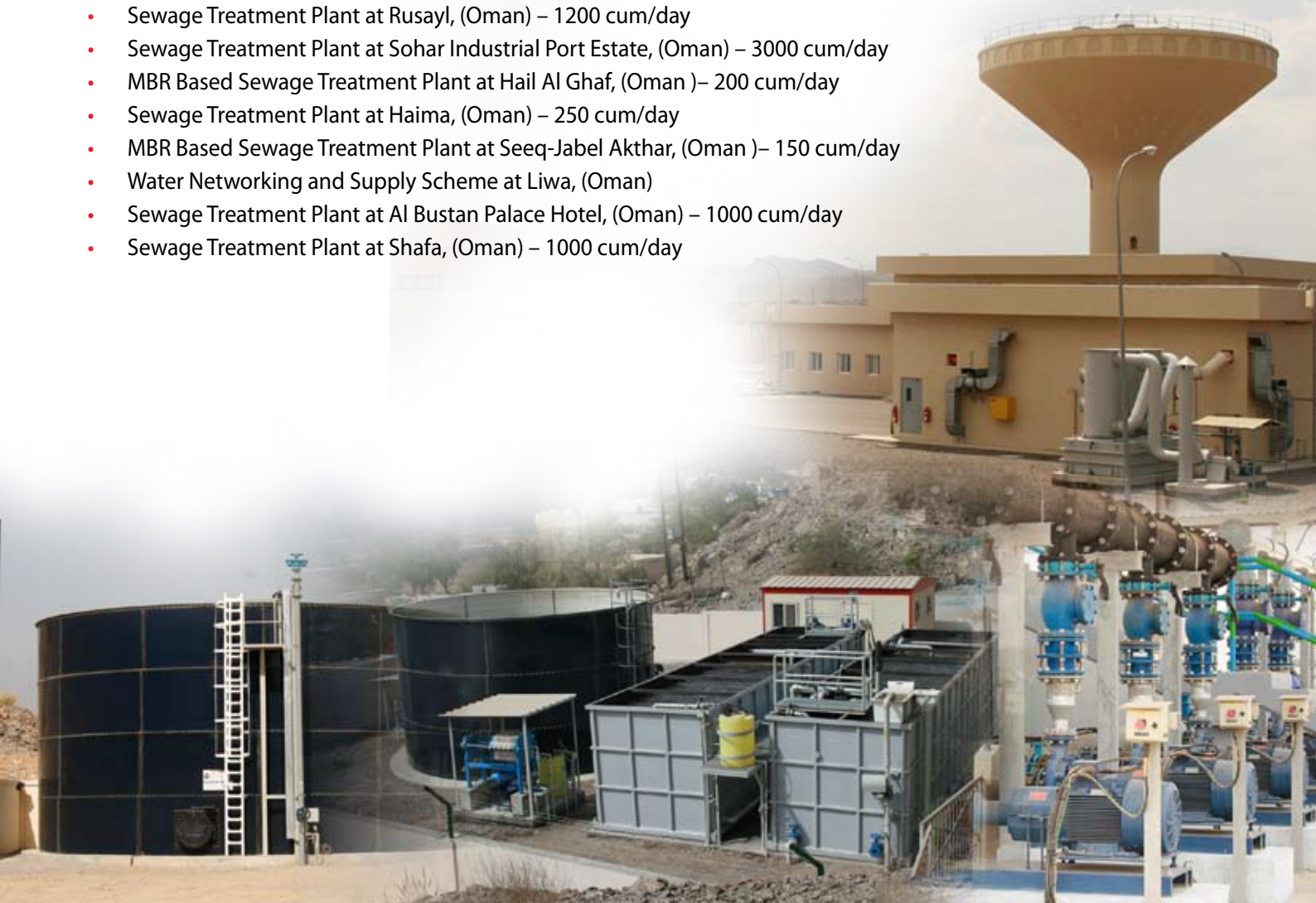




## MAJOR PLANT REFERENCE

### PLANT REFERENCES

- MBR Based Sewage Treatment Plant at Barka, (Oman) – 6000 cum/day
- River Water Treatment Plant, (Mozambique) – 750 cum/day
- RO Based Sea Water Desalination Plant, Lakbi (Oman) - 500 cum/day
- RO Based Brackish Water Desalination Plant, Awaifiya (Oman) – 200 cum/day
- Sewage Treatment Plant at SAFI, (India) – 50 cum/day
- MBR Based Sewage Treatment Plant at SAQ, (Oman) – 7500 cum/day
- MBR Based Sewage Treatment Plant at MSQ, (Oman) – 2500 cum/day
- RO Based Brackish Water Desalination Plant, Dibba (Oman) – 1000 cum/day
- Sewage Treatment Plant at Rusayl, (Oman) – 1200 cum/day
- Sewage Treatment Plant at Sohar Industrial Port Estate, (Oman) – 3000 cum/day
- MBR Based Sewage Treatment Plant at Hail Al Ghaf, (Oman) – 200 cum/day
- Sewage Treatment Plant at Haima, (Oman) – 250 cum/day
- MBR Based Sewage Treatment Plant at Seeq-Jabel Akthar, (Oman) – 150 cum/day
- Water Networking and Supply Scheme at Liwa, (Oman)
- Sewage Treatment Plant at Al Bustan Palace Hotel, (Oman) – 1000 cum/day
- Sewage Treatment Plant at Shafa, (Oman) – 1000 cum/day





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