

# APPLICATION SHEET    **HIGH TDS REDUCTION**

## LOW CHEMICAL CONSUMPTION

We use the most efficient systems and design to reduce the chemical consumption.

## NETWORK READY

We provide an Ethernet port in our PLC so you can connect and pull all the information you need.

## LOW NOISE

We use low rpm motor for the RO pump. This reduces substantially the noise level making the system surrounds a much better place to work.

## CONTAINERIZED OPTION:

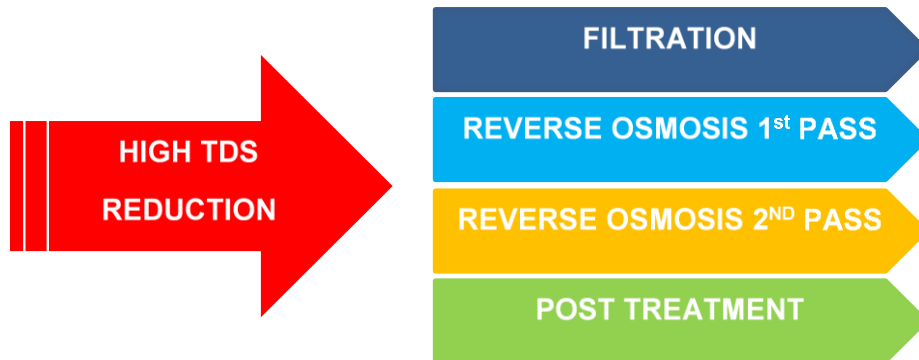
System is build inside the standard ISO 40 feet acoustic and thermal isolated container proving a robust and reliable housing for the delicate equipment inside and expediting the deployment and commissioning of the system substantially.

There are potential health effects caused due to high TDS content in drinking water. The hard water will taste bitter, salty, or metallic and may have unpleasant odors. High TDS water is less thirst quenching. High TDS interferes with the taste of foods and beverages, and makes them less desirable to consume. Some of the individual mineral salts such as Nitrates, Sodium, Sulfates, Barium, Cadmium, Copper and Fluoride that make up TDS pose a variety of health hazards such as causing stiffness in the joints, hardening of the arteries, kidney stones, gall stones and blockages of arteries, microscopic capillaries and other passages in which liquids flow through our entire body.

Sustainability of good health of living organisms depends upon the purity of water. Because of its inherent dissolution capacity, water naturally picks up minerals and salt present in the earth crust during the runoff and percolation process. Water is used for several purposes by human beings and the level of purity of water consumed is very crucial as it has a direct and telling effect on health.

### SOLUTION:

In general these are the main steps to achieve desired High TDS Reduction water quality:

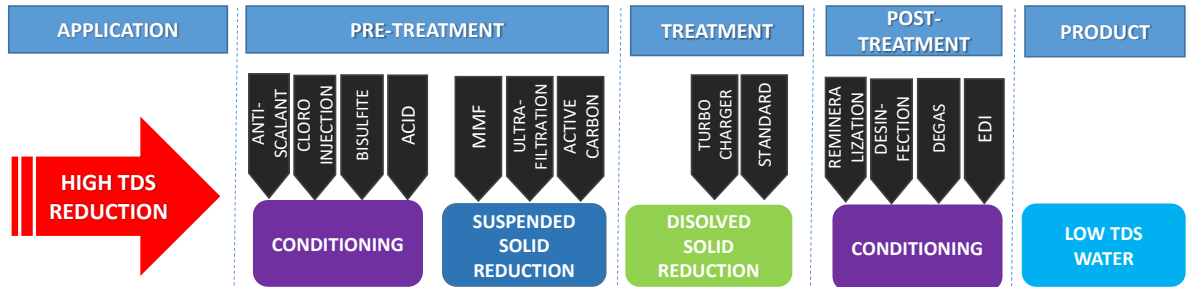


### OPERATING PARAMETERS:

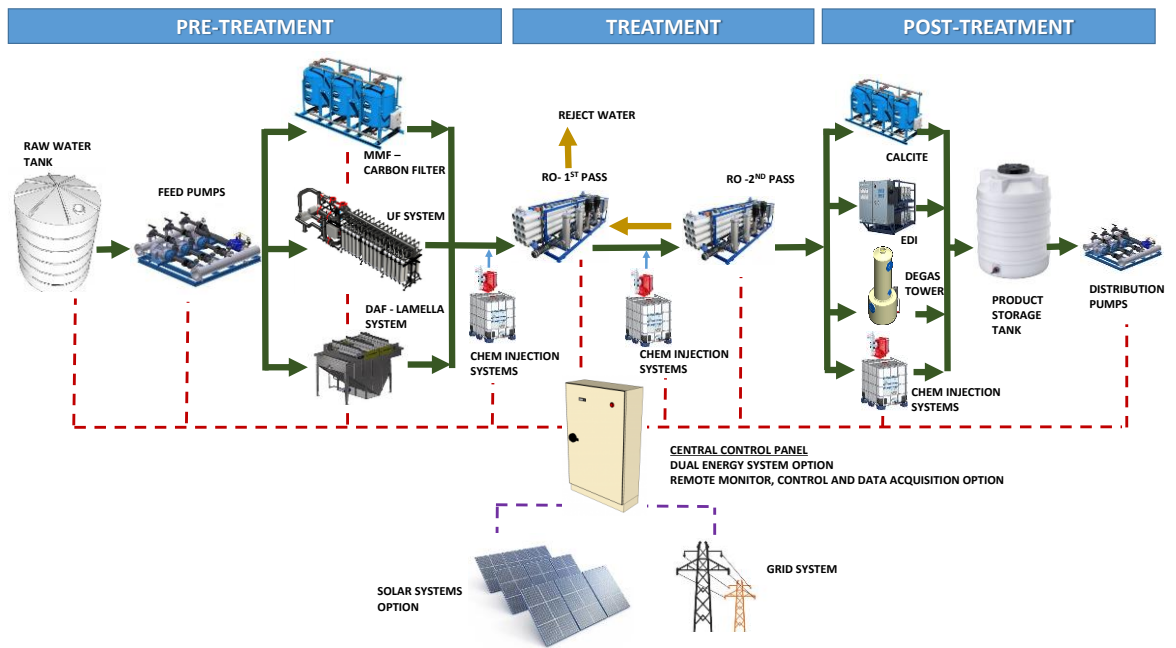
- TDS..... 100-12,000 mg/l (as NaCl)
- SDI15..... < 3.0
- Temperature..... 25 to 35°C (77 to 95°F)
- Recovery ..... 70 to 85%
- Nominal Rejection ..... >98%
- Incoming Power.....480/380/220/110V 60/50Hz

Note: Required 3bar (45psi) minimum customer supplied pressure to high pressure RO Feed Pump. Temperatures and high salinities will reduce system productivity

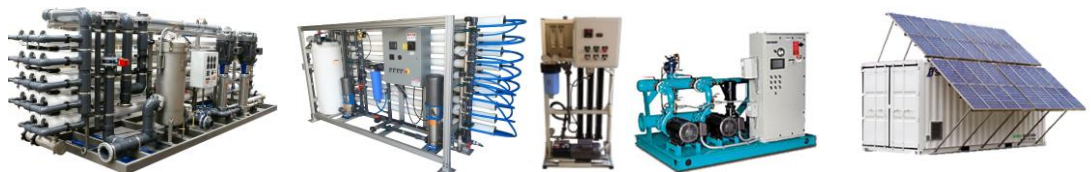
## OUR SOLUTION



Complete flowchart for High TDS Reduction process showing the ADVANCEES systems. This flowchart vary based on raw water quality and customer's requirement. Many options and combinations are possible, the best solution needs to accommodate the minimum life cycle cost such as low operating cost, low maintenance, easy to operate and monitor



Some equipment available:



### TECHNICAL SUPPORT

Commissioning, Start-up, operators training, maintenance training, retrofits and modernization are available.

### ZERO DOWNTIME

We supply all the basic two years critical spare parts with our units. Also we use very well know and proved components in all of our systems.

### TURNKEY SOLUTIONS

We can provide the basic RO systems plus all pretreatment and Post treatment such as:

- Chemical injection systems
- Multimedia systems.
- Calcite contact tanks
- Ozono generators
- UV disinfection
- H2S removal

For more information on any of our products or services please visit us on the Web at:  
[www.advancees.com](http://www.advancees.com)

## SOME INSTALATIONS:

### CUSTOMIZATION

We customize any of our system to your needs, please send us your inquiry for a quick proposal. [sales@advancees.com](mailto:sales@advancees.com)

For more information on any of our products or services please visit us on the Web at: [www.advancees.com](http://www.advancees.com)



DESALINATION 1,000 M3D



DEGAS TOWER 200GPM



LARGE DESALINATION 60,000M3D



DESALINATION 2,000 M3D



POTABLE WATER 120 GPM



DOUBLE PASS WITH EDI



TDS REDUCTION PROCESS WATER 210GPM



CONTAINERIZED SYSTEMS



MULTIMEDIA FILTRATION



DESALINATION 1,500 M3D



ULTRAPURE WATER 50 GPM



LOW TDS - 1,200 M3D



ULTRAFILTRATION 188 GPM

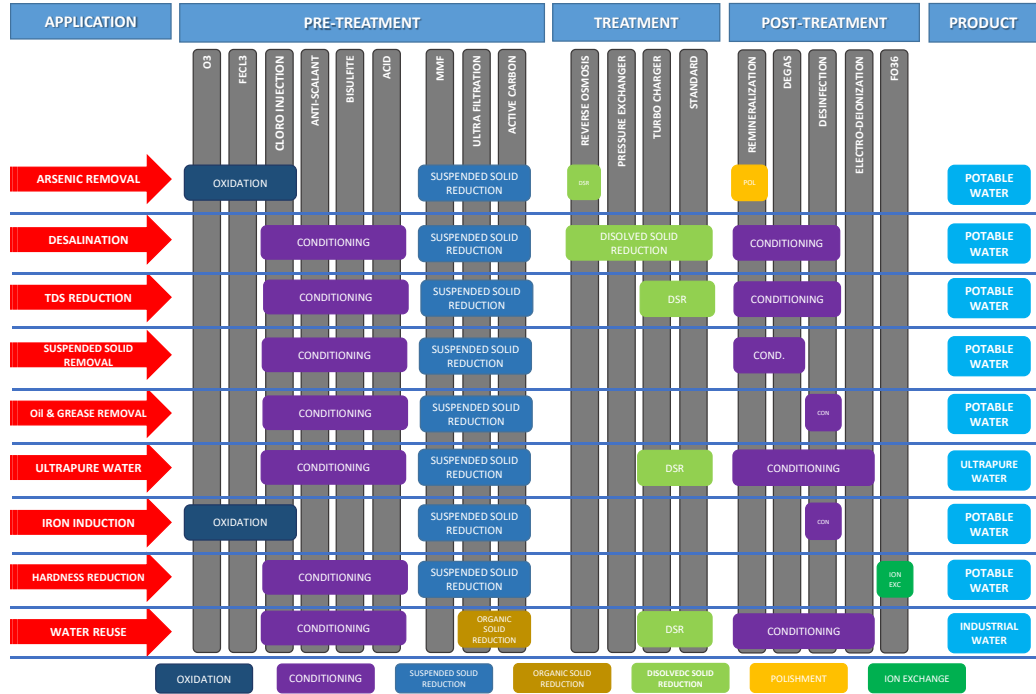


UF 85 GPM



DRILLING WELL

## Other Applications Offered:



For more information on any of our products or services please visit us on the Web at: [www.advancees.com](http://www.advancees.com)

You can find more detailed information of the different applications at [www.advancees.com/applications](http://www.advancees.com/applications)