



Decide with Confidence



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Technical Specification

1. Raw Water Quality

R.O. plant is 6000 TDS
designed based On :

Hardness : 3000

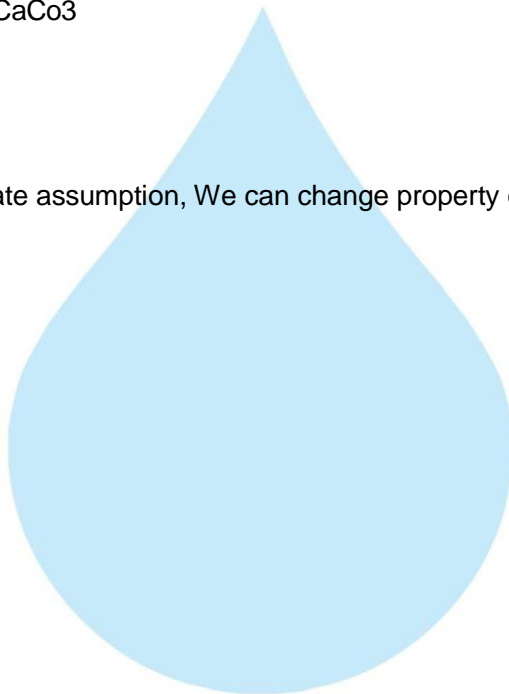
Application :-

2. Treated Water Quality

Suspended Solids : Nill
Turbidity : Nill
PH : 7.0 To 7.5
T D S : Less than 120 ppm
Total Hardness : 60 ppm as CaCo3
Bacteria Coliform : Nill

Application :-

The above water quality is approximate assumption, We can change property of minerals/ions in water by editing the raw water in R.O. treated water



3. Raw Water Feeding Pump

Type :	Centrifugal
Max. Flow :	65000 m ³ /HR
Working Flow :	60000m ³ /HR
Working Pressure :	2 Kg. / Cm ²
M.O.C. :	C.I.
Power :	10 HP
Manufacturer :	Kirloskar / EQI
Nos. Offered :	1 Nos.



Application :-

To Pump Raw Water at Required Pressure so as to enable Transfer Through The RO Pre-Treatment Stage.

4. Pressure Sand Filter (FRP)

Type :	Down Flow Graded Sand Type
Model :	6080/RW/MGF
M.O.C. :	MS
Size Dia X Height :	1500 mm X2000mm
Pipe Line Size :	75 mm
Sand Qty. :	3500Kgs
Valves :	Butterfly MS Valve
Max. Flow :	65 m ³ /hr
Working Flow :	60 m ³ /hr



Application :-

By means of Multi size Graded sand filled in the Vessel of stainless steel material, which is natural process of filtration adopted by the nature Raw Water is first filtered by filtration unit in series prior feeding RO Plant. Pressure Sand Filter Unit is provided for removal of suspended matters & turbidity from raw water. PSF Unit is a SS vertical Pressure Vessel. Internally, it is fitted with bottom collecting system. Uniform grades silica quartz sand is charged on the supporting media of pebbles and gravels.

5. Activated Carbon Filter (FRP)

Type :	Down Flow Graded Sand Type
Model :	6080/RW/MGF
M.O.C. :	MS
Size Dia X Height :	1500mm X 2000mm
Pipe Line Size :	75 mm
Carbon Qty. :	1500 Kgs
Valves :	Butterfly MS Valve
Max. Flow :	65 m3/hr
Working Flow :	60 m3/hr

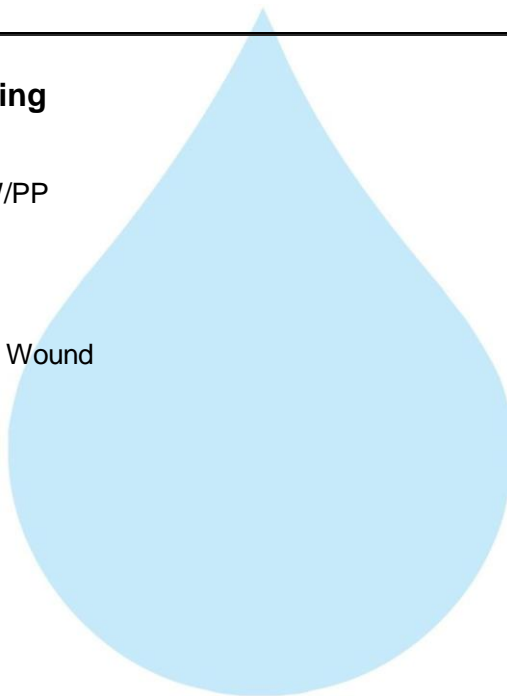


Application :-

To Remove taste, odour, chlorine, colour and. It can absorb contaminated particles of Oil & Grease from the raw water. It will control the BOD & COD in the raw water. Activated Carbon can remove Chlorine, Odour, & Colour other organic material from feed water prior to reverse osmosis. This Carbon granules having larger surface area and specific property to absorb organics.

6. Micron Cartridge Filter Housing

Model :	MCF 20/RW/PP
Size :	30*4 Long
Micron Rating :	5 Micron
Type of Candle :	P. P. Spun / Wound
Material of Housing :	PP
Nos. of Candles :	8 nos
Max. Flow :	65 m3/HR
Working Flow :	60 m3/HR



Application :-

To protect the membrane and the high pressure pump from suspended particles by removing them up to 5 Micron.

7. Antiscalant Dosing Pump

Type :	Ele. Diaphragm Type
Capacity :	10 LPH (3 nos)
M.O.C. :	PP
Dosing Chemical :	Antiscalant
Dosing Rate :	10 LPH
Manufacturer :	E Dose / I dose

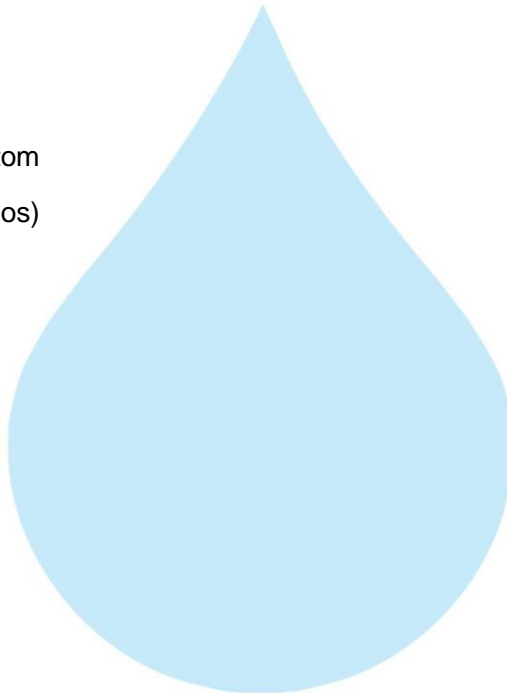


Application :-

The hardness salts of calcium & magnesium are likely to be precipitated if concentration exceeds its solubility limit & it may fault the membranes resulting into scaling which ultimately leads to poor treated water quality from R.O. System.

8. Antiscaling Dosing Tank

Type :	Conical Bottom
Capacity :	100 Ltr. (3 nos)
M.O.C. :	HDPE
Manufacturer :	Reputed



9. High Pressure Pump

Type :	Vertical Centrifugal Pump
M.O.C. :	SS
Max. Pressure :	17 Kgs. / Cm 2.
Working Pressure :	15 Kgs. / Cm 2.
Max. Flow :	65000 m3/HR
Working Flow :	60000 m3/HR
Motor :	30 KW
Manufacturer :	2900 RPM
Nos. Offered :	3 Phase
Make of Pump :	Grundforce



Application :-

For Reverse Osmosis Process to take place feed pressure of water need to be raised. For this purpose a Vertical Multistage Centrifugal High Pressure Pump in S.S construction is provided R.O. System requires operating pressure of about 15-17 kg/cm² . High-pressure pump is fitted with S.S. discharge pipe work with necessary control valves. Necessary instruments like a High Pressure Switch, Pressure Gauge and recirculation valves are provided for safer operation of system

10. RO Membrane

Model :	8040 Element
Type :	TFC Spiral Wound
Material :	Polymide
Size :	8" Dia X 40" Long
Manufacturer :	Toray / Hydranautics / Dow / EQI
Nos. Offered :	35 Nos.



Application :-

To reduce Raw Water T.D.S. through the concept of Reverse Osmosis where R.O. Modules processes Raw Water and produces Purified Water having the Salt Rejection of Raw Water in the range of 90 – 95%. By using Semi permeable Membrane filter elements, where ion filtration process is carried out by applying pressure in the water. So finally we will get Low salt water with low total dissolve solids and High purity. Here will have to drain the water at one side to Wash the Membrane filter elements continuously because of filtration process there is nothing to be polluted in the system.

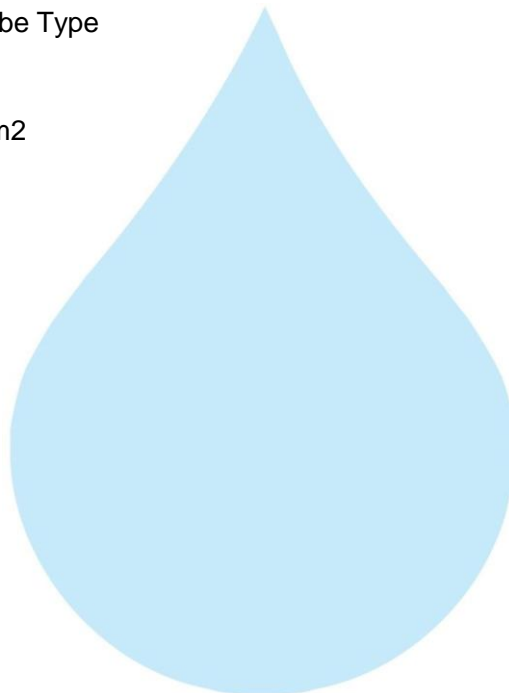
11. Fiber - Reinforced Plastic Pressure Vessels

M.O.C. : code Line
Type : Horizontal Tube Type
Size : 8" X 200"
Max. Pressure : 400 PSI
Working Pressure : 240 PSI
Nos. Offered : 7 Nos.



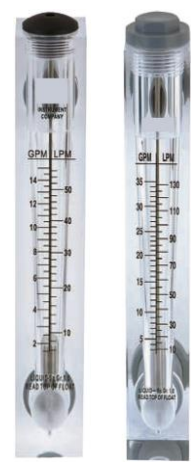
12. Pressure Gauges

Pressure Gauges : 4 Nos.
Type : Bourdon Tube Type
Manufacturer : Raj
Range : 0 - 21 Kg/cm²



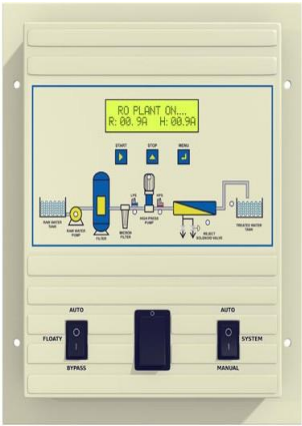
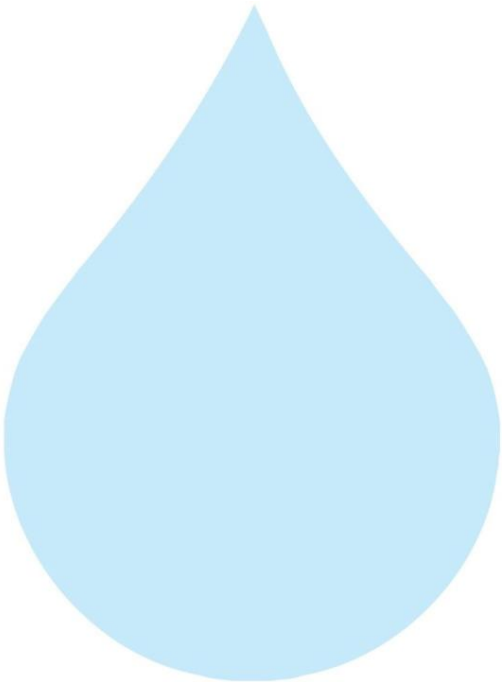
13. Rota Meters

Rota Meters : 2 Nos.
Type : Float
M.O.C. : Acrylic Body
Reject Water Range : SS Float (0 - 35000 Lph.)
Treated Water Range : SS Float (0 - 60000 Lph.)
:



14. Control Panel - PLC Base

Manufacturer : Astral



15. Pressure Switch

Pressure Switch : 2 Nos.
Type : Low / High Pr.
Manufacturer : Denfoss
Model : IPS 70 / 400



16. Stand For Unit

Stainless Steel : SS 304



Application :-

Complete stand for unit will be made of S.S.304

17. UPVC Interconnecting Pipe Lines

Interconnecting Pipe Lines : All interconnecting Piping Raw Water Pump to RO will be provided of pvc by us.



Application :-

All interconnecting Piping Raw Water Pump To RO will be provided of UPVC by us.

