

## **Description**

# <u>Sub: - Our Quotation for R O + UV Water Purification System 250 LPH CENTERLIZE RO SYSTEMS</u>

01. Technical Specifications : Annexure - I

We recommend the R.O. plant of 500 lph capacity, for safe and proper working.

We hope you will find our quotation in line with your requirements, however if you have any further clarifications please do get in touch with us.

Thanking you and assuring you of our best services at all times.

## **Technical Details:**

## **ASSUMPIONS**

FEED WATER TDS 10000ppm
Fluorides <1ppm
Iron <0.1ppm

Turbidity <5

PH <7.5 & > 6.5

### Scheme:

Raw Water Pump $\rightarrow$  Sand Filter $\rightarrow$  Carbon Filter $\rightarrow$  Anti Scalent Dosing System $\rightarrow$  Micro Filtration $\rightarrow$  High Pressure Pump $\rightarrow$  Membrane $\rightarrow$  Product Water Storage Tank (Client Scope)

FEED WATER 700LPH

FEED WATER TDS 3000PPM
PRODUCT WATER 500LPH
RECOVERY 40%
SALT REJECTION 95%

<u>In case of high Turbidity customer needs to provide a settlement tank and Alum dosing system is to be incorporated. The cost of the same has not been considered with in the scheme.</u>

### **Technical Specs:**

Raw Water Tank (Client Scope)

This tank ensures a constant supply of the raw water to the machine.

### **Feed Water Pump**

The system would require an Inlet Pressure of 1.5 Kg/cm<sup>2</sup> minimum for smooth operation. To provide the same the Raw Water Pump is being incorporated in the system.

## **Description**

Make : Crompton/Kirloskar/Usha

Power : 1 Hp

230 Volts

Phase : Single Type : Mono Block

The system is required to be feed with "O" turbidity water. The **Pressure Sand Filter** is incorporated in the system to ensure the same. The **Pressure Sand Filter** offers a filtration up to 30 microns.

The **Filter** consists of a **Non Corrosive Vessel** that can withstand pressure up to 6.5 Kgs/cm², **Multi Graded Sand Filtration Media** for filtration, **Internal Distribution System** to distribute the water evenly inside the vessel for proper filtration, **Multi Port Value (MPV)** for easier operation along with **Back Wash** and **Rinse** facilities, a **stand** to hold the **MPV** in position and **Pressure Gauges** to know the position of the sand filter.

This system is required to be feed with **NIL Chlorine** water. The **Activated Carbon Filter** is incorporated in the system to ensure the same. It also ensures that the water is **color less**, **odor less** and contains no dissolved gases.

The **Filter** consists of a **Non Corrosive Vessel** that can withstand pressure up to 6.5Kgs/cm², **Multi Graded Sand and Activated Carbon Filtration Media** for filtration, **Internal Distribution System** to distribute the water evenly inside the vessel for proper filtration, Multi Port Value (MPV) for easier operation along with **Back Wash** and **Rinse** facilities, a stand to hold the **MPV** in position and **Pressure Gauges** to know the position of the **Activated Carbon filter.** 

The filter is designed for 14m/sec internal flow for proper filtration.

## **Description:**

Vessel : FRP Size : 13"54"

Volume : 105 Lts

Multi Port Value Filter : 25 Nb Top Mounted
Media : Silica Sand
Multi Grade

Min Operating Pressure : 1.5kg/Cm<sup>2</sup>

Max Operating Pressure : 4.5kg/Cm<sup>2</sup>

Avg Operating Pressure : 2-3kg/Cm<sup>2</sup>

#### **MICRON FILTER**

Due to the induction of the dosing chemical some of the particles may coagulate in the water. This coagulated particle cannot be allowed to enter the membrane. The Micron Filter ensures that all such particles above the size of 5 micron are being filtered out of the water so as to enhance the system life. It also ensures that even all un dissolved particles above the size of 5 Micron are being filtered out.

#### **Description:**

No. Offered : Two
20"Slim Housing : PP
Specs : Two
Filters Nos. Offered : Two
Micron Rating : 5 Micron

#### **HIGH PRESSURE PUMP**

In the system, the membrane filtration takes place at high pressure only in the range of 8-14 KG/CM2. To provide such high pressure the Pressure Booster Pump is being induced in the system to boost the pressure to the required level for the proper filtration process.

## **Description:**

Make : CRI/Nanfang Power : Single Phase

Model : 2-150

Type : Horizontal Multi Stage

Pressure Rating : 1.5 M3 At 140m Head Max Pressure : 17 Kgs/Cm<sup>2</sup>

Normal Operating

Pressures : 8-14 Kgs/Cm<sup>2</sup>

### **MEMBRANE HOUSING**

The membrane housing provides the shell for the membranes to allow the highly pressurized water to pass through the membrane.

## **Description:**

MOC : FRP No. Offered : One

Specs : 4:40 (Double Element)

Max Pressure : 21 Kgs/ Cm<sup>2</sup> Operating Pressure : 9-14 Kgs/ Cm<sup>2</sup>

### **MEMBRANE**

The system consists of Thin Film Composite Membrane made out of Poly Urethane acetate that provides a filtration level up to 0.0001 micron. These operate at a pressure between 9-14 kgs/cm2 this result in a dissolved salt rejection of up to 95%. The membrane separates the water into two streams. One is the premed or the product water and the other is the rejection.

## **Description:**

Make : DOW/Hydronotics

Specs : 4040 No. Offered : Two

Operating Pressure : 9-14 Kgs/ Cm<sup>2</sup>

## **ELECTRICAL CONTROL PANEL**

MOC:PlasticPower:Single PhaseCondutivity Meter:InbuiltLPS Adjuster:InbuiltHPS Adjuster:Inbuilt

**WET PANEL** 

MOC:SSFlow Meters:TwoPressure Gauges:TwoLPS:OneHPS:One

**SKID** 

MOC : SS

**PIPING** 

Raw Water Pump to Micron Filter : UPVC Micron Filter to Flow Meters : UPVC

Product Line : UPVC (As Per FDA &NSF)

Reject Line : UPVC

## **Terms & Conditions**

## **Transportation**

### Extra as on actual

Scope of work

Installation and commissioning Servicing as per terms mentioned Material, Fabrication, Assembling,

**Delivery schedule** 

15 days from the date of advance

(depend on payment schedule)

Dispatch

2 days for Delhi, 7 day for outside Delhi (dependent

on

transport)

Installation and commissioning 2 days dependent on site

**Force Majeure Clause:** Our offer is subject to the acceptance of Force Majeaure \_Clause such as strike, lockout, non-availability of raw material or acts of God such as fire, flood draught, earthquakes etc, which are beyond our control.

In case of any query please feel free to contact us. Thanking you and assuring you of our best services at all times.

## **PRICE SCHEDULE**

S.No	Item Description	Rate	Qty	Amount	
01	Reverse Osmosis System with a capacity of 500LPH	Rs. 180000	01	180,000 /-	
Total				1,80,000/-	
Payment Schedule					
Advance				70%	
Against Performa Invoice				30%	
On Ins	On Installation and Commissioning				

## **Terms & Conditions**

Transportation Extra as on actual

Scope of work Material, Fabrication, Assembling,

Installation and commissioning Servicing as per terms mentioned

Delivery schedule 15 days from the date of advance

(depend on payment schedule)

Dispatch 2 days for Delhi, 7 day for outside Delhi

(dependent on transport)

Installation and commissioning 2 days dependent on site

<u>Force Majeaure Clause:</u> Our offer is subject to the acceptance of Force Majeaure Clause such as strike, lockout, non-availability of raw material or acts of God such as fire, flood draught, earthquakes etc, which are beyond our control.

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