PROJECT REPORT
FOR
BIS APRUVAL

ISI MARKED PECKAGED WATER

BASED ON
R.O.MINARAL DRINKING WATER
TRUNKEY PLANT

PROJECTED BY

A-ACCURATE ION EXCHANGE & CHEMICAL
Vatva Ahmedabad
INTRODUCTION & ABOUT OF PROJECT HOLDER & MINERAL WATER PLANT

Welcome to all living life of earth by A-ACCURATE ION EXCHANGE & CHEMICAL. Airs, Water & Food are most Precious gift to human living from nature. Human life circles are start from first to last with mother touch of air & water. Most of water is unusable or highly polluted, this is the reason to treat or filter & count every drop of water. From Human consumption to versatile industrial applications, there is no choice for pure & sure water & here we are step in A-ACCURATE Ion Exchange & Chemical, We are Designing, Manufacturing & Supplying Water Treatment system which adheres to world's most stringent norms, with our on knowledge & on work shop.

About A-ACCURATE Ion Exchange & Chemical We are in design, development, & manufacturing since last 25 years. In this field we are working in turnkey project of Granule plant, water filtration system, pharmaindustri, chemical dies - intermediate & textile units. Our any suggestion, offer, or, solution are not as only types of sales agent or, traders, which one only one marketing office, & product of plant in various shops, assemble in other shop with help of 4 to 5 venders, & contractor., They haven't knowledge of technical calculation, fundamentals & their parameters. We are working as manufacturer with our own work shop since last 20 years

A-ACCURATE ION EXCHANGE & CHEMICAL is our print view 20 year's hard work experiences, knowledge
& real advance technology for solution of your pure & sour water with in your budget cost.

A-ACCURATEION EXCHANGE & CHAMICAL
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We are working with :- 1 Government of Gujarat/India's all mega corporations boards & Nigams, 2 Fertilizers, 3 Chemical plants, 4 Thermal plant, 5 cement plant, 6 Paper plant, 7 Sugar plant.

In water filtration & purifier we have worked since last 20 years in strings or bore water with filtration R.O. & purifier to at least sewage treatment recycles or reuse of water.

A-Accurate Ion Exchange & Chemical
For your ready reference here we are giving list of our product & spares & chemical supply in various companies.

List of Plant

- ISI Based R.O Plant & Mineral Water Plant. (COMBO/TRUNKY BASIS )
- Semi/Automatic PET BOTTELS making machine
- FULLY Automatic single/double head pouch machine
- ZAR Washing & filling machine
- D.M. Plant & Pure water Generation Loops.
- WATER Softening & Filtration plant.
- Mix bed plant.
- Pressure send filter.
- Sewage treatment plant
- Micron cartridge filter.
- Ozone Generating Set.
- Effluent Treatment plant.
- Swimming pulls filtration plant.
- Waste Water Recycling plant.
- Sea – Water Desalination Plant.
- Water Park rides & Wave pools.
• Pure water generation with ultra filtration, EDI/Ozonation & Distribution system

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• List of Spares & Chemical
  • R.O. Membranes.
  • Cartridge.
  • Steiner.
  • U.V. Purifier.
  • T.D.S. Miter.
  • Dosing Pump
  • Ozonation.
  • All Types Skid. (M.S. & S.S)
  • All Type of Vessels.(M.S.R.L., S.S.316 & FRP)
  • D.M. water Tank (S.S. 316).
  • Sterilizer Tank. (s.s.316)
  • All type of Pressure Tube. (FRP, S.S.304, S.S.316 etc.)
  • All type of piping.(‘u’ PVC, MSRL, S.S.304, S.S.316)
  • Jumbo Filter Housing.
  • High Pressure pump. (S.S, Single / Multi Stage)
  • Tasting Kit.
  • P.H. Miter.

• CHEMICAL
  • Cooling Tower Chemical.
  • Anti Corrosive Chemical.
  • All type of Resin.
  • Carbon.
  • Media.
  • Membrane Cleaning Chemical.
  • Special antiskalent & Other as Required.
  • Boiler Feed chemical.
  • Effluent Treatment Chemical.
ABOUT MINERAL WATER & THEIR QUALITY

Mineral water can be safely defined as potable water, containing the necessary mineral nutrients required by the body and beneficial to human metabolism.

Potable spring water containing sulphur, iron, magnesium and other mineral salts occurring in certain regions are claimed to be beneficial to human metabolism. The Therapeutic value of such waters is questionable carbonated mineral water also contain lithium salts.

Natural fresh water supplies are derived indirectly from his oceans. The water flows over the surface or percolates into the ground excess water flows back to the oceans completing the hydrological cycle.

Water supplies are classified as

1. Surface supplies

2. Underground water

Surface water is rivers, lakes, ponds and reservoirs.

Wells and spring are the sources of underground water.
Water vapor in clouds is generally pure but gathers dust and gases when it reached the earth suspended organic matter and soil turbidity are picked up. We it waters usually are free from suspended materials and organic matters due to filtrations through the earth. Surface water is generally low in mineral content but relatively high in suspended and organic materials.

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<table>
<thead>
<tr>
<th>Ionic &amp; Dissolved</th>
<th>Undissolved</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cationic</td>
<td>Anionic</td>
</tr>
<tr>
<td>Calcium</td>
<td>Bicarbonate</td>
</tr>
<tr>
<td></td>
<td>Alkalinitiy</td>
</tr>
<tr>
<td>Manesium</td>
<td>Carbonate</td>
</tr>
<tr>
<td>Sodium</td>
<td>Hydroxyl</td>
</tr>
<tr>
<td>Potassium</td>
<td>Sulfate</td>
</tr>
<tr>
<td>Ammonium</td>
<td>Chloride</td>
</tr>
<tr>
<td>Iron</td>
<td>Nitrate, Phosphate</td>
</tr>
<tr>
<td>Manganese’s</td>
<td>Silica, Fluoride,</td>
</tr>
<tr>
<td></td>
<td>Organics, Color</td>
</tr>
</tbody>
</table>

**Organic material may be suspended or dissolved ionic or nonionic.**

**NATIONAL RECUATIONS FOR DRINKING WATER**

<table>
<thead>
<tr>
<th>PARAMETER</th>
<th>MAX CONTAMINANT LEVEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arsenic</td>
<td>0.05</td>
</tr>
<tr>
<td>Barium</td>
<td>1.00</td>
</tr>
<tr>
<td>Cadmium</td>
<td>0.010</td>
</tr>
<tr>
<td>Chromium</td>
<td>0.05</td>
</tr>
<tr>
<td>Lead</td>
<td>0.002</td>
</tr>
<tr>
<td>Mercury</td>
<td>1.0</td>
</tr>
<tr>
<td>Nitrate</td>
<td>0.01</td>
</tr>
<tr>
<td>Selenium Fluoride</td>
<td>1.4-2.4</td>
</tr>
<tr>
<td>Edrin</td>
<td>0.0002</td>
</tr>
</tbody>
</table>
**USES & APPLICAITION**

Mineral water is pouch & bottle under very hygienic conditions under strict Quality control before being marketed its major use is in hotels, tourist place, function & People houses where good quality pure water is required for potable purposes. It is marketed at place and regions where hygienic drinking water is not freely available.

**MARKET**

The consumption of mineral water is linked with public health as the concept has virtually been imported from the western media. The necessity and hygienic nature of the product has led to an increase in its consumption in mainly the high income grade people and tourist. India’s potential for tourism is virtually limitless.

The mineral water is one of the important items which are directly consumed by people all over the world. Due to consideration of health view point the consumption of ordinary water is gradually decreasing. The ordinary water contains is many toxic elements, impurities which some time causes fatal. People are generally being aware to consume clean pure water where is available. Some time people have to suffer from different diseases. The mineral water consumption...
is well advised. So major consumption of mineral water is generally assessed by the number of people & tourist. They generally consume mineral water sealed in pouch & bottle.

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MANUFACTURING PROCESS

THE BASIC MANUFACTURING PROCESS CONSISTS THE FOLLOWING STEPS

Advance technology by Reverse Osmosis System (Filtration)
↓
Pos Filtration & UV Sterilized
↓
Blending with Ozonisation
↓
Quality Control & Testing
↓

_____________________________________________
↓                    ↓                         ↓
Bottling                      Pouch Packing              Cup Filling & Jar Filling
↓
Dispatching
TREATMENT SCHEME & FILTRATION SYSTEM.

RAW WATER TANK CLIENT SCOPE
↓
RAW WATER PUMP
↓
MULTI GRADE FILTER
↓
ACTIVATED CARBON FILTER
↓
BLENDING SYSTEM (TDS ADJUSTMENT)
↓
SP. ANTISCALENT DOSING SYSTEM.
↓
MICRON CARTRIDGE FILTER
↓
HIGH PRESSURE PUMP
↓
R. O. MODULES
↓
PRODUCT WATER STORAGE TANK
PRODUCT WATER TRANSFER PUMP
↓
POST MCF FILTER UNIT – I
↓
POST MCF FILTER UNIT – II
↓
ULTRA VIOLET STERILIZER UNIT
↓
OZONE RE-CIRCULATION TANK
↓
OZONE RE-CIRCULATION PUMP
↓
OZONATION SYSTEM & TANK
↓
DISPTCH & PAKAGING
## HELPLINE

### GENERAL HELP

1. To provide the information about the profitability of the project in general.
2. Inform you about the demand existing in your area.
3. Site selection considering following parameters:-
   a) Raw Water Quality
   b) Space Availability
   c) Location Of Area
4. Free Raw Water Testing at our Advanced Laboratory
5. Designing appropriate scheme duly confirmed by our Associates Drawing, G.A. Drawing, Photograph etc.
6. On Order Confirmation We will submit the following:-

   - Total Building Construction Layout (If new Building is consisting of all Hygienic Standards as per WHO, EEC, US FDA, ISI 010500 Standards is to be built.
   - Offering Necessary Changes in Existing Building (If Existing Building is to be used.)

### MARKETING HELP

1. Recommending the Names of NID GUYS for Selection of Brand Name.
2. We can give you the Ideas and help you in Preparation of Literature.
   Action Plants for Marketing the product (I.E. Recommending Marketing Team etc.)
3. We Can Help you in Executing the Formalities to be done for the Govt.
**COST OF PRODUCTION**

**FOR BOTTLE: 1 LTR**

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Cost (Rs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Cost of Bottle + Cap</td>
<td>2.20</td>
</tr>
<tr>
<td>B. Cost of Label Shrining</td>
<td>0.15</td>
</tr>
<tr>
<td>C. Cost of Cap Shrining</td>
<td>0.05</td>
</tr>
<tr>
<td>D. Cost of Water</td>
<td>0.03</td>
</tr>
<tr>
<td>E. Cost of Misc</td>
<td>0.05</td>
</tr>
<tr>
<td>F. Cost of Interest per Liter on Capital Investment</td>
<td>0.03</td>
</tr>
<tr>
<td>G. Packing (Cartoon) Cost per Bag</td>
<td>0.30</td>
</tr>
</tbody>
</table>

**TOTAL COSTING OF 1 LTR. BOTTLE**  
Rs. 2.81

**FOR POUCHES: 250ml.**

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Cost (Rs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Cost of Empty Pouch With Printing</td>
<td>0.05</td>
</tr>
<tr>
<td>B. Cost of Water 250ML.</td>
<td>0.0075</td>
</tr>
<tr>
<td>C. Cost of Miscellaneous</td>
<td>0.001</td>
</tr>
<tr>
<td>D. Cost of Interest per Liter on Capital Investment</td>
<td>0.0042</td>
</tr>
</tbody>
</table>

**TOTAL COSTING OF 1 POUCH OF 250ML.**  
Rs. 0.0627

**FOR ZAR (CARVOYS): 20 LTRS.**

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Cost (Rs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Cost of Transportation</td>
<td>0.30</td>
</tr>
<tr>
<td>B. Cost of Water 20 LTRS.</td>
<td>0.60</td>
</tr>
<tr>
<td>C. Cost of Miscellaneous</td>
<td>0.01</td>
</tr>
<tr>
<td>D. Cost of Interest per Liter on Capital Investment</td>
<td>0.30</td>
</tr>
<tr>
<td>E. Cost of Maintainous</td>
<td>0.10</td>
</tr>
</tbody>
</table>

**TOTAL COSTING OF 1 ZAR OF 20LTRS.**  
Rs. 01.31
## PROFIBILITY CHART

<table>
<thead>
<tr>
<th>PROFIT ABILITY CHART</th>
<th>BOTTLE</th>
<th>POUCH</th>
<th>ZAR</th>
</tr>
</thead>
<tbody>
<tr>
<td>SELLING COST</td>
<td>6.50</td>
<td>0.55</td>
<td>20.00</td>
</tr>
<tr>
<td>OPRATING COST</td>
<td>2.80</td>
<td>0.10</td>
<td>2.20</td>
</tr>
<tr>
<td>PROFIT PER ITEM</td>
<td>3.70</td>
<td>0.45</td>
<td>17.80</td>
</tr>
</tbody>
</table>

### TOTAL PROFIT FOR WATER QTY. 72,000 LTRS:

<table>
<thead>
<tr>
<th>ITEM WISE PACKING</th>
<th>LITRS/Nose</th>
<th>ITEM</th>
<th>PROFIT Rs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOTTLE PACKING</td>
<td>8,000 let.</td>
<td>8,000 BOTTLES (3.70 X 8000)</td>
<td>29,600/-</td>
</tr>
<tr>
<td>POUCH PACKING</td>
<td>2500ltr/.250 10,000Nos.</td>
<td>0.45 X 10,000</td>
<td>4,500/-</td>
</tr>
<tr>
<td>JAR PACKING (20 LTRS)</td>
<td>30,000 let.</td>
<td>17.80 X 1500</td>
<td>26,700/-</td>
</tr>
<tr>
<td>TOTAL PROFIT PER DAY</td>
<td></td>
<td></td>
<td>60,800/-</td>
</tr>
<tr>
<td>TOTAL PROFIT PER MONTH</td>
<td></td>
<td></td>
<td>18,24,500/-</td>
</tr>
<tr>
<td>TOTAL PROFIT PER YEAR (gross profit)</td>
<td></td>
<td></td>
<td>2,18,88,000/-</td>
</tr>
</tbody>
</table>

-- 33 % Total handling, conveying & transportation cost on GP.  -- 76,23,000/-

TOTAL NET PROFIT APROXIMATLY 1, 46,65,000/-
QUOTATION FOR
R.O. MINERAL WATER 2000 LPH PLANT.

KIND ATTN: Managing Director
Dear Sirs,

SUB. :: YOUR REQUIREMENT OF WATER TREATMENT PLANT BASED ON R.O.SYSTEM (CAPACITY 2000 LTR/HR.)

REF. ::

We refer to the Personally discussions you had with the undersigned in connection with your requirement of Water Treatment Plants and other machineries for your upcoming project to manufacture Packaged Drinking Water. We wish you the best success for the same.

As discussed, we are sending herewith our complete offer for the plant and machineries. Treatment Plant is considered of 2000 LPH capacity comprising of complete system with Pre-treatment, State-of-the-Art reverse Osmosis Unit and Post Treatment etc. System is designed to produce water as per International Bottled Water Association (IBWA), Bureau of Indian Standards (BIS) and US Drinking Water Act (USDWA).

We also have offered filling machineries viz. Pouch Form, Fill & Seal Machine etc. Offered machineries are fully automatic and do not require much manpower.

Technical data, other required details are as per enclosed data sheet, while commercial terms and conditions are as per enclosed offer.

We are sure, you will find above as desired by you and now we look forward to receive your valuable order.

Meanwhile, if you require any further information, please feel free to contact us for the same.

With thanks and best regards,
Yours faithfully,
FOR, A-ACCURATE ION EXCHANGE & CHAMICAL
<table>
<thead>
<tr>
<th>ANNEXURE NO.</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>SALIENT FEATURES OF R.O. SYSTEM</td>
</tr>
<tr>
<td>2.</td>
<td>BASIS OF DESIGN &amp; TREATMENT SCHEME</td>
</tr>
<tr>
<td>3.</td>
<td>TECHNICAL SPECIFICATIONS</td>
</tr>
<tr>
<td>4.</td>
<td>SCOPE OF SUPPLY</td>
</tr>
<tr>
<td>5.</td>
<td>SCHEDULE OF EXCLUSION &amp; TERMINATION</td>
</tr>
<tr>
<td>6.</td>
<td>PRICE, COMMERCIAL TERMS &amp; CONDITIONS.</td>
</tr>
<tr>
<td>7.</td>
<td>SCHEMATIC DIAGRAM</td>
</tr>
</tbody>
</table>
ANNEXURE - I

SALIENT FEATURES OF SYSTEM

01. The proposed Water Treatment Plant based on R O Technology is designed to produce product water at the flow rate of 2000 LPH as per below mentioned.

(FULLY AUTOMATIC WITH DIGITAL DISPLAY)

Note :: The proposed water treatment system based on R O Technology can even work continuously for 20hrs. Per day.

02. M O C of the R O Membrane housing, which housings the R O Membranes inside them. The heart of the system becomes very much critical criteria when the chemical cleaning is done. Apart from that we have offered you the S.S.316 RO Membrane Housing.

03. The proposed Water Treatment System is AUTOMATIC system not the conventional Manual & Semi-Automatic system, which will be operated through control panel & if fault in the system indicate in digital display with LCD blinking.

The control panel will give the continuous display of the Product water Quality, before it enters into the RO Product water storage tank. The proposed Water treatment system will also trip in the eventuality of Low Suction pressure, High Pressure and product water tank full and Indicate on digital display board.

04. M O C of pressure vessel for Pressure Sand Filter & Activated Carbon Filter unit will be Stainless Steel.

05. Multi port valve mechanism is provided for Filter system instead of conventional Six - valve mechanism to facilitate the smooth operation and less maintenance requirement.

06. All inter connecting as well as frontal pipe-work for the entire system will be made of S.S.316 instead of conventional of UPVC/M.S. piping.
ANNEXURE - II
BASIS OF DESIGN AND TREATMENT SCHEME

1.1 PLANT INTRODUCTION ::

The proposed Water Treatment Plant based on R O Technology is designed to produce product water at the flow rate of 2000 LPH as per below mentioned.

1.2 RAW WATER ANALYSIS ::
We have designed the proposed water treatment system based on Assumed raw water analysis.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color</td>
<td>True color</td>
</tr>
<tr>
<td>Odour</td>
<td>Agreeable</td>
</tr>
<tr>
<td>Taste</td>
<td>Salty</td>
</tr>
<tr>
<td>PH Value</td>
<td>7.20</td>
</tr>
<tr>
<td>Total Dissolved Solids as CaCO3</td>
<td>&lt; 1500 ppm.</td>
</tr>
<tr>
<td>Total Hardness as CaCO3</td>
<td>&lt; 250 ppm</td>
</tr>
<tr>
<td>Silica as SiO2</td>
<td>05 ppm</td>
</tr>
<tr>
<td>TOTAL SUSPENDED SOLIDS</td>
<td>NIL</td>
</tr>
</tbody>
</table>

1.3 END WATER QUALITY :: (AFTER R. O. SYSTEM)

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>T. D. S.</td>
<td>Less than equal to 100 PPM</td>
</tr>
</tbody>
</table>

1.4 PLANT OPERATING DATA :: ALT – I

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feed flow rate</td>
<td>4000 LPH</td>
</tr>
<tr>
<td>Product flow rate</td>
<td>2000 LPH</td>
</tr>
<tr>
<td>Average recovery</td>
<td>50-60%</td>
</tr>
<tr>
<td>Operating Pressure</td>
<td>10-12 Kg/cm²</td>
</tr>
</tbody>
</table>

Note: The proposed water treatment system based on R O Technology can even work Continuo sally for 20hours per day.

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**TREATMENT SCHEME ::**

- RAW WATER PUMP
- MULTI GRADE FILTER
- ACTIVATED CARBON FILTER
- BLENDING SYSTEM (TDS ADJUSTMENT)
- SP. ANTI SCALENT DOSING SYSTEM.
- MICRON CARTRIDGE FILTER
- HIGH PRESSURE PUMP
- R. O. MODULES
- PRODUCT WATER STORAGE TANK
- PRODUCT WATER TRANSFER PUMP
- POST MCF FILTER UNIT – I
- POST MCF FILTER UNIT – II
- ULTRA VIOLET STERILIZER UNIT
- OZONE RE-CIRCULATION TANK
- OZONE RE-CIRCULATION PUMP
- OZONATION SYSTEM

1.6 R. O. FEED WATER LIMING CONDITIONS ::

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>T. D. S.</td>
<td>1,500 PPM (MAX.)</td>
</tr>
<tr>
<td>Suspended Solids</td>
<td>Nil</td>
</tr>
<tr>
<td>Heavy metals</td>
<td>Nil</td>
</tr>
<tr>
<td>Oil and Grease</td>
<td>Nil</td>
</tr>
<tr>
<td>Turbidity</td>
<td>Nil</td>
</tr>
<tr>
<td>Residual Chlorine</td>
<td>Nil</td>
</tr>
<tr>
<td>Color / Odour</td>
<td>Absent</td>
</tr>
</tbody>
</table>

The END WATER quality shall be achieved subject to ::

1. Feed quality is same as specified in your enquiry. In case of any change in the quality of raw water, the same may have any implications on the Operating parameters and End - water quality of the system.

2. Feed limiting condition mentioned in our this offers are strictly maintained.

3. Operation of water treatment plant is strictly followed in totality as per our operating manual & instruction.

A-ACCURATEION EXCHANGE & CHAMICAL
ANNEXURE - III
TECHNICAL SPECIFICATION

01. RAW WATER PUMP
Quantity offered :: One No. (1 HP)
Capacity :: 5000 LPH
Discharge press. :: 2.5 Kg/cm²
Make :: CROMTON/ Kirloskar / Equi.

02. MULTI GRADE FILTER
Quantity offered :: One No.
Type :: Vertical pressure vessel
Capacity :: 10000 LPH
Dimension :: Ø 400mm X 1500 mm ht. X 2 mm thick.
M O C :: Stainless Steel – 316
Filter media :: Silica Quartz sand with pebbles & Gravels
Service cycle :: Whenever pressure drop across unit exceeds 0.8kg/cm²
Backwash dur. :: 15 - 20 Minutes.
Discharge press. :: 2.5 Kg/cm²

03. ACTIVATE D CARBON FILTER
Quantity offered :: One No.
Type :: Vertical pressure vessel
Capacity :: 10000 LPH
Dimension :: Ø 400mm X 1500 mm ht. X 2 mm thick.
M O C :: Stainless Steel – 316
Filter media :: Activated Carbon
Service cycle :: Whenever pressure drop across unit exceeds 0.8kg/cm²
Backwash dur. :: 15 - 20 Minutes.
Discharge press. :: 2.5 Kg/cm²

04. SPECIAL ANTI-SCALENT DOSING SYSTEM ::
Quantity offered :: One No.
Type :: Electronic diaphragm type dosing pump
Flow rate :: 0 – 5 LPH
HDPE tank cap. :: 50 Ltr.
Operating press. :: 2.0 Kg/cm²
Make :: E-Dos/Emec/Meter pump – Italy/equi.

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119, Rajdeep Indus. Estate/h Saurastra Narolak Paint, Vatva Tolnaka, Vatva cross Road
05. MICRON CARTRIDGE FILTER UNIT
Quantity offered :: One No.
Type :: Replaceable Cartridge
M O C of cartridge:: Polypropylene
M O C of housing :: Stainless Steel
Capacity :: 10000 LPH
Dimension in Inch:: 4" Dia x 20" HOS, 1 Nos
Discharge press. :: 1.0 Kg/cm²

06. HIGH PRESSURE PUMP :
Quantity offered :: One No.
Type :: Vertical Multi Stage centrifugal
Capacity :: 5000 LPH
M O C :: Stainless Steel
Discharge press. :: 10-12 Kg/cm²
Type of drive :: Squirrel cage induction motor,
Motor rating :: III Phase 3.5 KW
Make :: SUMO/CRI/Equi.

07. R. O. MODULE ::
Item :: R O Module with SS-316 Pressure tubes & R O Membrane.
Type of membrane:: Thin film composite poly amide spirally wounded.
Operating pressure:: ----------------10-12 Kg/cm²-------------
Make of membrane:: Filmtec(Dow)-USA/Hydranautics-USA/Eq.
MOC of press. Tube hsg.:SS-316 (Ø 8” X 80” with 80 40- 2Nos Membrane)

08. PRODUCT WATER STORAGE TANK ::
Quantity offered :: One No.
M O C of tank :: Stainless Steel
Capacity :: 1000 Ltrs.

09. PERMEATE WATER TRANSFER PUMP ::
Quantity offered :: One No.
Capacity :: 2000 LPH
Discharge press. :: 2.5 Kg/cm²
M O C :: S.S.
Make :: STD.

A-ACCURATEION EXCHANGE &CHAMICAL
10. **MICRON CARTRIDGE FILTER UNIT – I**
   - Quantity offered :: One No.
   - Type :: Replaceable Cartridge
   - M O C of cartridge:: P.P.
   - Cartridge rating :: 1.0 Micron
   - M O C of housing :: Stainless Steel – 316
   - Capacity :: 2000 LPH
   - Discharge pressure:: 1.0 Kg/cm²

11. **MICRON CARTRIDGE FILTER UNIT – II**
    - Quantity offered :: One No.
    - Type :: Replaceable Cartridge
    - M O C of cartridge:: P.P.
    - Cartridge rating :: 0.5 Micron
    - M O C of housing :: Stainless Steel – 316
    - Capacity :: 2000 LPH
    - Discharge pressure:: 1.0 Kg/cm²

12. **ULTRA VIOLET STERILIZER UNIT ::**
    - Quantity offered :: One No.
    - Type :: Vertical
    - M O C :: Stainless Steel.

13. **OZONATION SYSTEM ::**
    - Quantity offered :: One No.
    - Type :: Vertical
    - M O C :: Stainless Steel

14. **OZONE RE-CIRCULATION TANK**
    - Quantity offered :: One No.
    - M O C of tank :: Stainless Steel
    - Capacity :: 1000 Ltrs.

15. **OZONE RE-CIRCULATION PUMP ::**
    - Quantity offered :: One No.
    - Capacity :: 2000 LPH
    - Discharge press. :: 2.5 Kg/cm²
    - M O C :: S.S.
ANNEXURE – IV
SCOPE OF SUPPLY

01. Raw Water Pump with motor One No.
02. Pressure Sand Filter consists of ----
   - SS Pressure vessels with manual multiport valve One No.
   - Initial charge of media One No.
   - Frontal pipe work with necessary fittings
03. Activated Carbon Filter consists of ----
   - SS Pressure vessels with manual multiport valve One No.
   - Initial charge of media One No.
   - Frontal pipe work with necessary fittings
04. Special Anti Scalent Dosing System ---
   - Dosing Pump & tank One No
05. Micron Cartridge Filter unit incorporating of ---
   - Micron cartridge with housing One No.
06. High pressure pump with motor One No.
07. R O Modules incorporating ---
   - RO Membrane : M/s. Filmtec-Dow/Hydranutics/Equi.
   - R O Pressure tubes (MOC : SS316) One Lot.
   - R O Skid with control panel along with instruments
   * High pressure inter connecting piping (S.S.316)
08. Product Water Storage tank. One No.
09. Product water transfer pump One No.
11. Post Micron Cartridge Filter unit – II One No.
12. Ultra Violet Sterilizer Unit One No.
13. Ozonation system One No.
15. Ozone re-circulation Pump One No.

INSTRUMENTATION

01. Conductivity meter One No.
02. Flow indicator (Product/Reject) Two No.
03. Low pressure switch / High pressure switch One No.
04. Pressure Gauges One Lot.
ANNEXURE - V
SCHEDULE OF EXCLUSION AND TERMINATIONS

SCHEDULE OF EXCLUSIONS ::

01. All civil works such as plant foundation of the equipments, mass concreting etc.
02. Supply of power to Motors, regeneration chemical for trial run and commissioning.
03. Laboratory testing facility, instruments and reagents.
04. Lubricants, Oil & Grease as and when required.
05. Raw water storage tank and transfer pump, product water storage tank and transfer pump.
06. All equipments, works and services, not specifically mentioned in our proposal.
07. Storage & site security.

TERMINATION POINTS ::

01. Inlet of Raw Water Pump at 2.5 Kg/cm²
02. Permeate / Reject outlet of R O System.
03. Overflow and drain pipe work of all vessels.
04. Power control termination at High Pressure Pump, R O Product / raw water transfer pump, Ozonation system.

CLIENT TO PROVIDE ::

01. Control supply :: 220 Volts (I Phase, 50Hz for all Instrumentations.
02. Power supply :: 220 Volts ± 10 Three / Single phase 50 Hz for high Pressure pump
03. Service water :: Flow rate 2500 LPH
04. Lab testing facility:: For analysis of water.
05. Labor :: As and when required.
06. Chemicals :: Sp.Anti Scalent dosing
A-ACCURATE ION EXCHANGE AND CHAMICAL

119, Rajdeep Indus. Estate/h Saurastra Narolak Paint, Vatva Tolnaka, Vatva cross Road
Vatva, Ahmedabad-382440. Phone: 64503834 M:+91 9537530913
E-mail: ronak@a-accuratewater.com Web:a-accuratewater.com

Ai/10/219/11

ANNEXURE - VI

PRICE, COMMERCIAL TERMS & CONDITION

PRICE ::
Our price for Design & Engineering of proposed water treatment system,
based on R.O. System as described in our earlier Annexure shall be ..... 2000
LPH........ S.S. 316 ...Rs. 8,51,000/-
(Rupees Eight Lac Fifty One Thousand Only)

Our price is Ex-works (Factory) and Exclusive of -
- Transportation up to your site.

EXCISE DUTY: Extra at actual, if applicable. At present Nil.
SALES TAX: Extra at actual, @ 5 % VAT.
OCTROI : Extra at actual, if applicable.

However, any change in Govt. levies / interpretation / etc. at the time of Execution
will be on Buyer's Account.

PAYMENT TERMS: 70% Advance with clear P O
30% against performa Invoice prior to dispatch
05% of Erection & commissioning charges.

DELIVERY :: Within 8-10 weeks from the date of receipt of P O along with
Advance subject to Force Major Clause.

VALIDITY :: 30 DAYS

GUARANTEE / WARANTEE
The water treatment system supplied is guaranteed for a period of 12 months from
the date of commissioning OR 18 Months from the date of last major supply,
whichever is earlier.

Equipment guarantee is valid against defective workmanship and / or poor
performance of the system only. Our liability is limited to repair or replace the
same and not subject to any wear / tear or supply of consumables / spares.

Above guarantee is subjected to:
01. Using spare parts / consumables recommended by us.
02. Operation and maintenance of the plant as per our operation manual.

FOREIGN EXCHANGE VARIATION CLAUSE ::
We have considered the prevailing foreign exchange market rates at the date and
time of our proposal for our imported components. However, any change in the
Foreign Exchange rates at the date and time of issuance of Purchase Order will be
on Buyer's Account.

With thanks and best regards,
For, A-ACCURATE ION EXCHANGE AND CHAMICAL.
ANNEXURE – VII
SCHEMATIC DIAGRAM
A-ACCURATE ION EXCHANGE & CHEMICAL
119, Rajdeep Indus. Estate/h Saurastra Narolak Paint, Vatva Tolnaka, Vatva cross Road
Vatva, Ahmedabad-382440. Phone:64503834 M: +91 9537530913
E-mail:ronak@a-accuratewater.com Web:a-accuratewater.com

Ai/ro/210/11

QUOTATION FOR: - JAR WASHING & FILLING MACHINE.

Ref:- As per Personal Matting.

Respected Sir,

We are very much thankful for showing your keen interest in our water treatment range of products & very much thankful for furnishing us an opportunity this will be a small but significant step in establishing the long lasting ad mutually beneficial relationship between A-ACCURATE and your Good Self.

1- 20 LTRS. Jar washing machine two head hot washing & normal washing
   Machine SS304
       SS316

2- 20 LTRS. Jar FILLING machine two head.
   Machine SS304
       SS316

Our price is Ex- works (Factory) and Exclusive of -Transportation up to your site
   - Packing Forwarding, Lading & Unloading charges extra (Apex 5%)

EXCISE DUTY :: Extra at actual, if applicable. At Present Nil
SALES TAX :: Extra at actual, at present 5% VAT or Against Form 'C'
OCTROL :: Extra at actual, if applicable.

However, any change in Govt. levies / interpretation etc. at time of Execution will be on Buyer's A/c

PAYMENT TERMS :- 80% Advance with clear PO, 20% against prior to dispatch.

DELIVERY: With in Six - Eight Week.

With thanks and best regards.

For A-ACCURATE ION EXCHANGE & CHEMICAL
Dear Sirs,

We are very much thankful for showing your keen interest in our water treatment range of products & are very much thankful for furnishing us an opportunity. This will be a small but significant step in establishing the long lasting and mutually beneficial relationship between ACCURATE and your Good-Self.

As per your requirement, we are very much pleased to submit our proposal for Bottle sealing & filling machine as per following specification.

01. DOUBLE HEAD FULLY AUTOMATIC POUCH PACKING MACHINE…………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………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QUOTATION FOR BOTTELING MACHINE

Kind attn: - Managing Director

Dear Sir,

TECHNICAL PARAMETERS FOR 200ml to 2000 ml
RINSING, FILLING & CAPPING for Sámi automatic Machine

<table>
<thead>
<tr>
<th>Model Number</th>
<th>DS 24</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production capacity</td>
<td>1440 Butt/Hr.</td>
</tr>
<tr>
<td>Production Capacity for 2 Liters</td>
<td>1440 Bottles / Hour and 720 Bott/Hr.</td>
</tr>
<tr>
<td>Filling Capacity</td>
<td>200 ml to 2000 ml</td>
</tr>
<tr>
<td>Neck Description</td>
<td>Standard for full range</td>
</tr>
<tr>
<td>Voltage</td>
<td>380 V / 3 Ph / 50Hz</td>
</tr>
<tr>
<td>Total Power</td>
<td>8 Kw</td>
</tr>
<tr>
<td>Unit Dimensions (L x D x H)</td>
<td>3000 x 2200 x 2150</td>
</tr>
<tr>
<td>Max Air pressure</td>
<td>0.4 m3/min, 6-7 Bar</td>
</tr>
<tr>
<td>Wash Stages</td>
<td>2 Stage</td>
</tr>
<tr>
<td>Stainless Steel Grade</td>
<td>316 for product contact, all rest 314</td>
</tr>
<tr>
<td>Rinsing &amp; Washing Heads</td>
<td>8 to 12</td>
</tr>
<tr>
<td>Filling Heads</td>
<td>4 to 6</td>
</tr>
<tr>
<td>Capping Heads</td>
<td>2</td>
</tr>
<tr>
<td>Structure</td>
<td>Mono block</td>
</tr>
<tr>
<td>Bottle Type</td>
<td>PET Bottles only (NO GLASS)</td>
</tr>
</tbody>
</table>

Other General Features:

- New neck handling free suspension machines, helps to make bottles change over very easy, can change from one bottle size to another in matter of minutes
- All Full Stainless steel neck handling disc
- Inside and outside rinsing of Bottles
- Inside Recycle water tank to remove dirt
- Hot water for Wash cycle, with adjustable Heater temperature up to 60C
- Fully sealed units with large tempered glass windows for observation
- All transfer parts lower than filling valve
- No filling when there is no bottle, saving water
- Magnetic screwing heads with capping torque adjustable from 7-25 inch/pound
- All Parts contacting with finished product are made of AISI 316 and Anti-Ozone Food Grade material.
- Mitsubishi PLC controller equipped to make the entire process fully automatic
- Cap to be rinsed with final wash to remove any dirt and clean the cap
- All pipes are concealed to give better look and increase floor space
- Insulated Hot water tank to save energy
- Extremely Quite machine
- Low water sensor electric probe in the product tank to control the water level

For A-ACCUTE ION EXCHANGE & CHEMICAL
Dear Sir,

QUOTATION FOR LABORATORY INSTRUMENTS & CHEMICALS FOR PACKAGED DRINKING WATER

<table>
<thead>
<tr>
<th>SR NO</th>
<th>DESCRIPTION OF ITEMS</th>
<th>MAKE</th>
</tr>
</thead>
<tbody>
<tr>
<td>01.</td>
<td>Vertical Autoclave complete made of SS with pressure gauge safety valve, stream release.</td>
<td>BTI</td>
</tr>
<tr>
<td>02.</td>
<td>Hot Air Oven size 14 x 14 x 14 made of inner SS &amp; outer MS.</td>
<td>BTI</td>
</tr>
<tr>
<td>03.</td>
<td>B. O. D. Incubator digital readout temp. of 20° C.</td>
<td>BTI</td>
</tr>
<tr>
<td>04.</td>
<td>Incubator digital readout temp. 20° C.</td>
<td>BTI</td>
</tr>
<tr>
<td>05.</td>
<td>Incubator bacteriological for 37° C, size 14” x 14” x 14”</td>
<td>BTI</td>
</tr>
<tr>
<td>06.</td>
<td>Water bath inner chamber of SS outer of SS six holes of 3” with thermostatic</td>
<td>BTI</td>
</tr>
<tr>
<td>07.</td>
<td>Innoculation chamber</td>
<td>BTI</td>
</tr>
<tr>
<td>08.</td>
<td>Conductivity Meter</td>
<td>E I</td>
</tr>
<tr>
<td>09.</td>
<td>pH Meter Digital</td>
<td>E I</td>
</tr>
<tr>
<td>10.</td>
<td>Visible spectrophotometer</td>
<td>E I</td>
</tr>
<tr>
<td>11.</td>
<td>Turbidity meter digital</td>
<td>E I</td>
</tr>
<tr>
<td>12.</td>
<td>Colony counter digital</td>
<td>E I</td>
</tr>
<tr>
<td>13.</td>
<td>SS filter Hoder</td>
<td>B T I</td>
</tr>
<tr>
<td>14.</td>
<td>Microscope Binocular with bulb in Halogen lamp</td>
<td>Lebomed Vision</td>
</tr>
<tr>
<td>15.</td>
<td>Magnetic Stirrer with Hotplate</td>
<td>Remi</td>
</tr>
<tr>
<td>16.</td>
<td>Centrifuge</td>
<td>Remi</td>
</tr>
<tr>
<td>17.</td>
<td>Single Pan Balance</td>
<td>Standard</td>
</tr>
<tr>
<td>18.</td>
<td>Hot Plate</td>
<td>B T I</td>
</tr>
<tr>
<td>19.</td>
<td>Pressure High Vacuum pump single stage with ¼ HP Motor</td>
<td>Micronvac</td>
</tr>
<tr>
<td>20.</td>
<td>Gas Striping Apparatus with stand and clamp</td>
<td>Borosilicate</td>
</tr>
<tr>
<td>21.</td>
<td>Distill water Steel</td>
<td>S S</td>
</tr>
<tr>
<td>22.</td>
<td>Plantinum Crucible</td>
<td>10 gm</td>
</tr>
<tr>
<td>23.</td>
<td>Glass Cuvette</td>
<td>Glass</td>
</tr>
<tr>
<td>24.</td>
<td>Membrane Filter paper</td>
<td>PJAL</td>
</tr>
<tr>
<td>25.</td>
<td>Chemicals Total 104 Nos. Make : Ranbaxy, S.D. Fin, Thomas Baker as per IS 14543:2004</td>
<td></td>
</tr>
</tbody>
</table>

For A-ACCURATE ION EXCHANGE & CHEMICAL