NRO-500 Reverse Osmosis System

NECO 500 GPD Reverse Osmosis System

- Fully Equipped and Customizable
- Higher Recovery Rates
- Lower Energy Consumption
- High Flow Low-Energy Membranes
- Lower Maintenance
- Compact Space Saving Design
- Individually Wet Tested and Sanitized
- 1-Year Manufacturer’s Warranty
- Made in the U.S.A.

NECO Reverse Osmosis Systems feature an excellent pre-treatment design, high quality components and offer high performance. Marlo systems are designed for higher recovery rates and minimum energy consumption.

Experience greater savings with lower maintenance and operation costs when you install a NECO Reverse Osmosis System.
NRO-1000 Commercial Reverse Osmosis System

Standard Features:

- **Membrane**: Three 2.5” x 21” TFC HF1 Membranes – For maximum rejection of impurities and high flow.
- **Membrane Housing**: Three 2.5” x 21” PVC Membrane Housing.
- **Pump**: One 601 Fluid-O-Tech® 3.2 GPM Brass Rotary Vane Pump – Directly couples to the motor and is designed for continuous high pressures.
- **Motor**: One 1/2 HP Motor 110 or 220 Volt 50 or 60 Hertz
- **Frame**: One Aluminum White Powder Coated Frame – Corrosion resistant and light weight.
- **Flow Meters**: One Product (0-2 GPM) & One Waste (0-2 GPM) PuroTech™ Flow Meters – Enables operator to accurately adjust product to waste ratio and monitor systems performance.
- **Concentrate Re-Circulate**: This feature offers a higher recovery rate for the system by taking a % of the waste water and feeding it back through the system.
- **Sediment Filter**: One 4.5” x 10” 5 Micron Sediment Filter – Removes sediments and protects the system.
- **Carbon Block**: One 4.5” x 10” 10 Micron Carbon Block – Removes Chlorine, odor, and taste from the feed water.
- **Filter Housing**: Two 4.5” x 10” Polypropylene Filter Housing – Offers durability and improved sealing capabilities.
- **Pressure Gauges**: One 2.5” 0-300 PSI Panel Mount Glycerin Filled Gauge and Two 1.5” 0-160 PSI Bottom Mount Dry Gauges For monitoring the system’s operating pressure and the filter & carbon operating pressure.
- **Low Pressure Switch**: One Low Pressure Switch – Safety device which protects the pump from running dry when there is insufficient feed water pressure.
- **Solenoid Valve**: One Solenoid Valve with Manual Override 110 or 220 Volt 50 or 60 Hertz – Assists with the on/off functionality of the system.
- **Manual Flush Valve**: One 1/4” Brass Needle Valve – Regulates the product to waste ratio (system’s recovery).
- **Switch**: One Manual On and Off Switch
- **Easy Maintenance & Operation**: NECO reverse osmosis systems feature a compact design and have all of their components strategically located for easy access and inspection.

Optional Features:

- **Stainless Steel Pump**: Upgrades feed pump material from brass to 304 stainless steel.
- **Stainless Steel Housing**: Three 2.5” x 21” Stainless Steel Membrane Housings 3/8” FNPT
- **High Pressure Switch**: One Square D® High Pressure Switch – Automatically starts the system when the tank pressure falls below 40 psi and stops when the pressure reaches 60 psi.
- **TDS Meter**: One Panel Mount TDS Meter – Provides you with accurate readings of the product water quality.
- **Float Switch**: One Normally Closed Float Switch – For atmospheric storage tank applications.

### System Specifications

<table>
<thead>
<tr>
<th>Model</th>
<th>MRO-1000-2.5</th>
<th>Design</th>
<th>Vertical</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gallons Per Day</td>
<td>1000 @ 77°F</td>
<td>Dimensions (Approx.) 14” x 20” x 27”</td>
<td></td>
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<tr>
<td>Auto-Flush</td>
<td>N/A</td>
<td>Element Size (in.)</td>
<td>2521 TFC HF1</td>
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<tr>
<td>Elements (Qty.)</td>
<td>3</td>
<td>Motor HP</td>
<td>1/2</td>
</tr>
<tr>
<td>Voltage</td>
<td>110 or 220</td>
<td>Hertz</td>
<td>50 or 60</td>
</tr>
<tr>
<td>Feed Connection</td>
<td>3/4”</td>
<td>Product Connection</td>
<td>3/8”</td>
</tr>
<tr>
<td>Waste Connection</td>
<td>3/8”</td>
<td>Weight (Approx.)</td>
<td>70 lbs.</td>
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### System Operating Specifications

<table>
<thead>
<tr>
<th>Minimum Feed Pressure</th>
<th>35 psi</th>
<th>Minimum NaCl % Rejection</th>
<th>96%</th>
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<tbody>
<tr>
<td>Minimum Feed (GPM)</td>
<td>1.5</td>
<td>Maximum Hardness</td>
<td>Softened</td>
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<tr>
<td>Maximum TDS</td>
<td>2000 ppm</td>
<td>Operating Pressure</td>
<td>150 psi</td>
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<tr>
<td>Nominal NaCl % Rejection</td>
<td>98.5%</td>
<td>Maximum Feed (GPM)</td>
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<tr>
<td>pH Range</td>
<td>3-11</td>
<td>Maximum Temperature</td>
<td>105 °F</td>
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