Making a positive impact on our environment for today and future generations.
Reverse Osmosis System

The Reverse Osmosis System effectively purifies wash water for reuse with a multi-stage filter process and by pushing water molecules through a semipermeable membrane. Benefits of using this equipment include:

- Quality recycled water
- Removes 98% of dissolved salts and contaminants
- Easy operation and maintenance
- 4-stage pre-filter process
- Anti-bacterial treatment
- Handles water between 50-100°F
- Treats up to 1,000 gallons of water per day

Features:
- Powder coated steel frame
- PLC controls for automated operation
- CSA approved control panel
- Dual spiral wound membranes
- 30-micron, 10-micron, carbon and anti-scale filters
- 5.3-gallon pressure tank
- 0.5 HP transfer pump
- 250-gallon holding tank

Ideal for wash bays, this efficient system removes dissolved salts and contaminants from wash water for reuse and spot-free rinsing.

<table>
<thead>
<tr>
<th>MODEL NUMBER</th>
<th>GPM @ PSI</th>
<th>PERMEATE FLOW</th>
<th>POWER REQUIREMENTS</th>
<th>FRAME DIMENSIONS (LxWxH)</th>
<th>HOLDING TANK DIMENSIONS (WxH)</th>
<th>SHIP WT.</th>
</tr>
</thead>
<tbody>
<tr>
<td>WRO-1000-0M10</td>
<td>2.2 @ 200</td>
<td>0.7-0.8 GPM</td>
<td>208-230V, 1Ø, 15A</td>
<td>60x30x48in.</td>
<td>36x62in.</td>
<td>650 lb.</td>
</tr>
<tr>
<td>WRO-1000-0M30</td>
<td>2.2 @ 200</td>
<td>0.7-0.8 GPM</td>
<td>208-230V, 3Ø, 6A</td>
<td>60x30x48in.</td>
<td>36x62in.</td>
<td>650 lb.</td>
</tr>
</tbody>
</table>

230/208/460V 3-phase available on all models as options.

Option:

<table>
<thead>
<tr>
<th>PART NUMBER</th>
<th>DESCRIPTION</th>
<th>FITS MODELS</th>
</tr>
</thead>
<tbody>
<tr>
<td>WX-0143</td>
<td>460V, 3Ø - Upgrades 208-230V model to operate at 460V</td>
<td>All models</td>
</tr>
</tbody>
</table>

Accessories

<table>
<thead>
<tr>
<th>PART NUMBER</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>58-0023</td>
<td>Reverse osmosis storage cartridge</td>
</tr>
<tr>
<td>58-0024</td>
<td>Membrane cleaning cartridge, acid</td>
</tr>
<tr>
<td>58-0025</td>
<td>Membrane cleaning cartridge, alkaline</td>
</tr>
<tr>
<td>33-0653</td>
<td>Replacement handheld TDS meter</td>
</tr>
<tr>
<td>19-0216</td>
<td>30-micron pleated filter</td>
</tr>
<tr>
<td>19-0302</td>
<td>10-micron filter</td>
</tr>
<tr>
<td>19-0303</td>
<td>5-micron carbon filter</td>
</tr>
<tr>
<td>19-0304</td>
<td>Anti-scale filter</td>
</tr>
<tr>
<td>58-0026</td>
<td>5 oz. 0-ring lubricant for membranes</td>
</tr>
<tr>
<td>19-0306</td>
<td>Replacement membrane</td>
</tr>
</tbody>
</table>

30-micron pleated filter, 19-0216  Anti-scale filter, 19-0304  TDS meter, 33-0653  Reverse osmosis storage cartridge, 58-0023
Reverse Osmosis System
Process & Flow Description

1. **Inlet Connection** - Connect a water supply from a recycling system or a fresh water supply using a ¾-inch female hose fitting.

2. **Chemical Pre-Treatment System** - An adjustable diaphragm pump injects a solution of bleach into the system in order to kill bacteria that could damage the filters and membranes of the system.

3. **Pre-filter System** - A series of filters remove particles, chemicals and scale from the water that includes a 30-micron, 10-micron, carbon, anti-scale and 5-micron sediment filter.

4. **Monitoring System** - Permeate and concentrate flow meters, inlet and outlet reverse osmosis gauges monitor system performance and indicate when maintenance is required.

5. **Reverse Osmosis Pump** - Increases water pressure to 200-PSI to efficiently push the water molecules through the reverse osmosis membranes.

6. **Reverse Osmosis Membranes** - Dual spiral wound membranes remove dissolved solids from water. Contaminants pass through the concentration port into a drain or pit system.

7. **Purified Water in Holding Tank** - Purified water for rinsing and washing is stored in a 250-gallon tank with a level sensor that turns the system on as water is used.

8. **Transfer Pump System** - A 1/2 HP jet pump and 5.3-gallon tank pressurizes water at 30-PSI to 50-PSI for use through a pressure washer or hose.

9. **Outlet Connection** - Connect a pressure washer or garden hose using the ¾-inch male hose fitting.

10. **Control Panel** - CSA listed NEMA-4 rated corrosion-proof control panel for safe and reliable operation.
Reverse Osmosis System

The Reverse Osmosis Filteration System is perfect for the following applications:

- Rental Yards
- Golf Courses
- Heavy Equipment Dealers
- Trucking Facilities
- Military Bases
- Truck Rental Fleets
- Diesel Repair Facilities
- Forklift Washing Operations
- Aircraft Maintenance and Restoration
- Shipyards
- Municipalities/State DOTs
- Oil Fields
- Engine Rebuilders and Manufacturers

The Importance of a Proper Pit System

Once equipment is washed, the untreated wash water flows into your pit system. A proper pit system for your application is the first step in proper wash water treatment and a critical element in any wash water recycle system.

Consult Mi-T-M Corporation or your local distributor to determine the pit system configuration that works best for your application.