Claris Water Treatment System
for Convotherm by Cleveland Combi Ovens

System Components, Includes:
- one (1) Pre-filter
- one (1) Claris X-Large Steam System
- one (1) Claris Flow Meter
- one (1) Water Test Kit

Accessories:
- Claris X-Large Filter Cartridge (CWT-XLC)
- EC-110 Cartridge - Prefilter Replacement Cartridge (EC-110)

Cleveland Standard Features:

**E-10 Prefilter System**
- Filters out larger dirt and rust particles.
- Extends the life of primary filter cartridges.
- Tightly spun EC-110 sediment cartridge delivers 10 micron nominal filtration.
- Durable slim bowl design makes cartridge replacement easy.
- Clear housing allowing visual inspection of trapped particles to determine when to change the cartridge.
- 10" bowl design accepts most 10" drop in cartridges.

**Claris Single Head with Zero Bypass**
- Commercial quality filter head designed exclusively for Claris filter cartridges.
- Engineered for durability, strength and longevity.
- Corrosion resistant hardware.
- The system can be operated horizontally or vertically, depending on the available space.

**Water Test Kit**
- Used to determine the scale causing hardness (mainly calcium and magnesium).
- Indicates water test completion when the color changes from blue-green to orange-yellow.

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**MODEL:**  CWT-06 (includes complete system)

**Short Form Specifications**
Shall be Cleveland Model CWT-06 Claris Water Treatment System including one (1) Pre-filter, one (1) Claris X-Large Steam System, one (1) Claris Flow Meter & one (1) Water Test Kit.

**Claris X-Large Filter Cartridge:**
- 5-stage filtration process.
- Operation in vertical or horizontal position.
- NSF Certified under NSF/ANSI Standard 42.

**Claris Flow Sensor and Display**
- Monitors water usage rate to determine cartridge replacement.
- Display indicates cartridge replacement based on gallons of water treated.
- Display unit provides information about residual capacity of installed cartridge, total filtrate volume since flow sensor was installed, filtrate volume and operation time of last five (5) installed cartridges.
Technical Data:
Claris Water Treatment Components

Pre-Filter
Overall Dimensions: 12.44” H x 5.16” W (316mm H x 131mm W)
Inlet Connection: 3/4” FNPT
Outlet Connection: 3/4” FNPT
Service Flow Rate: Maximum 6.0 gpm (22.7 Lpm)
Pressure Requirement: 35 psi - 70 psi (2.4 - 4.8 bar) non-shock
Water Temperature Inlet Requirement: 39º - 86ºF (4º - 30ºC)
Electrical: No electrical connection required
Shipping Weight: 4 lbs.
Operating Weight: 6 lbs.

Claris X-Large Filter Cartridge
Overall Dimensions: 20.67” H x 5.35” Dia. (525 mm x 136 mm)
Service Flow Rate: 1.0 gpm (3.7 Lpm)
Treatment Capacity*: 1,100 gal.
Pressure Requirement: 35 psi - 70 psi (2.4 - 4.8 bar) non-shock
Water Temperature Inlet Requirement: 39º - 86ºF (4º - 30ºC)
Electrical: No electrical connection required
*Capacity is based on water hardness of 180 ppm.

Flow Meter Sensor
Overall Dimensions: 3.25 W x 2” H x 2” D (83mm W x 51mm H x 51mm D)
Connection: Inlet: 3/8-inch BSP F nut
Outlet: 3/8-inch BSP M
Service Flow Rate: 0.44-3.08 gpm (100-700 LPH)
Pressure Loss: 184 gph (up to 700 LPH flow rate)
3 PSI (0.2 bar)
Pressure Requirement: 35 psi - 70 psi (2.4 - 4.8 bar) non-shock
Ambient Temperature (min/max): 39 - 104 °F (+4 - +40 °C)
Installation Position: Horizontal recommended

Programmer & Display
Overall Dimensions: 2.75” H x 2” W (70mm H x 51mm W)
Cable: 59” (1.5 meters)
Electrical: Lithium Coin Battery (type CR2032)

WATER QUALITY REQUIREMENTS FOR CLEVELAND STEAMERS
TDS ................. < 60 ppm  pH Factor ............. 7.0 – 8.5
Total Alkalinity ...... < 20 ppm  Free Chlorine ...... < 0.1 ppm
Silica ................. < 13 ppm  Conductivity ........ min. 20 μS/cm (50 kOhms)
Chloride .............. < 25 ppm

NOTES:
Proper maintenance of the steam cooking equipment and water treatment system is the responsibility of the owner/operator. Improper installation or maintenance may void the warranty. Refer to the Operators Manual for proper instructions. A water quality analysis is required prior to installing the Claris water treatment system, since water conditions vary throughout the country.

Do not use the “Claris System” with water that is microbiologically unsafe or of unknown quality, without adequate disinfection before or after the system.
Short installation guide

1. [Diagram showing step 1]
2. [Diagram showing step 2]
3. [Diagram showing step 3]
4. [Diagram showing test kit]
5. [Diagram showing data table]

S/M min. > 5 l (1.5 US gal)
L/XL min. > 10 l (3.0 US gal)
XXL min. > 15 l (4.0 US gal)
# Capacities in US gallons

<table>
<thead>
<tr>
<th>°KH</th>
<th>Grains (US)</th>
<th>PPM</th>
<th>°FH</th>
<th>Capacity in US gal</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>S</td>
</tr>
<tr>
<td>&lt; 6</td>
<td>6</td>
<td>107</td>
<td>11</td>
<td>0</td>
</tr>
<tr>
<td>7</td>
<td>7</td>
<td>125</td>
<td>13</td>
<td>0</td>
</tr>
<tr>
<td>8</td>
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<td>0</td>
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<td>38</td>
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<td>679</td>
<td>68</td>
<td>0</td>
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</tbody>
</table>

Capacities are intended as guidelines and can vary according to the machine type. Please contact us for recommendations.
Test water to determine filter capacity

- Thoroughly rinse the vial with the same water to be tested

- Take 5 ml sample water

- Holding the reagent bottle vertically, add drops to the sample water and shake to mix even

- Start counting the drops when the water turns blue, record the number of reagent drops when sample water turns to orange-yellow

- With the number of drops recorded, look up on chart and locate the number of water gallon under XL column (or the column corresponding to filter size), record the number as result

Example: for 10 reagent drops, the filter capacity is 1060 US Gal.
### Setting the filter capacity in gallon
Please follow the capacity instruction for the appropriate CLARIS filter cartridge (see CLARIS filter Guide).

<table>
<thead>
<tr>
<th>Step</th>
<th>Button</th>
<th>Display</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>PROG.</td>
<td>Press the „PROG“ button once - „PROG“ flashes</td>
</tr>
<tr>
<td>2.</td>
<td>RESET</td>
<td>Press the „RESET“ button once – active digit flashes</td>
</tr>
<tr>
<td>3.</td>
<td>RESET</td>
<td>By pressing the „RESET“ button, set the desired value - For the digit “2”, press „RESET“ two times</td>
</tr>
<tr>
<td>4.</td>
<td>PROG.</td>
<td>Press the „PROG“ button once to confirm the desired digit and switch to the next digit. - Active digit flashes</td>
</tr>
<tr>
<td>5.</td>
<td>RESET</td>
<td>By pressing the „RESET“ button, set the desired value - For the digit „6“, press „RESET“ six times</td>
</tr>
<tr>
<td>6.</td>
<td>RESET</td>
<td>Repeat Steps 4 and 5 until all digits have been set</td>
</tr>
<tr>
<td>7.</td>
<td>PROG.</td>
<td>Press the „PROG“ button once - Final filter capacity is set - the programmed value appears</td>
</tr>
</tbody>
</table>

### Resetting the filter capacity (after replacement of filter cartridge)

<table>
<thead>
<tr>
<th>Step</th>
<th>Button</th>
<th>Display</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>-</td>
<td>Display flashes - Programmed filter capacity exhausted or maximum operation time of 12 months exceeded</td>
</tr>
<tr>
<td>2.</td>
<td>RESET</td>
<td>Press and hold the „RESET“ button for approx. 3 sec. - „rESEt“ appears on the display</td>
</tr>
<tr>
<td>3.</td>
<td>-</td>
<td>The filter capacity is reset and the last programmed value appears</td>
</tr>
</tbody>
</table>

### Memory Access
There is a possibility to individually retrieve the operating data (volume in gallon) and operation time in month of the last five filter cartridges installed.

<table>
<thead>
<tr>
<th>Step</th>
<th>Button</th>
<th>Display</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>PROG.</td>
<td>Press and hold the „PROG“ button for approx. 5 sec. - The digit „1“ appears</td>
</tr>
<tr>
<td>2.</td>
<td>-</td>
<td>The display indicates the volume in gallons and the operation time in months of the last cartridge in place</td>
</tr>
<tr>
<td>3.</td>
<td>RESET</td>
<td>Press the „RESET“ button once - The operating data of the next to last filter cartridge are displayed</td>
</tr>
<tr>
<td>4.</td>
<td>-</td>
<td>Repeat Step 3 to access to the memories of the prior installed filter cartridges</td>
</tr>
<tr>
<td>5.</td>
<td>PROG.</td>
<td>Press the „PROG“ button once - The current filter capacity is displayed</td>
</tr>
</tbody>
</table>