

# Water Treatment Selection

Protect your combi or Converge® multi-cook combi oven investment and extend equipment lifetime with Alto-Shaam's water treatment options. Whether investing in a reverse osmosis or water filtration system, Alto-Shaam has a solution to meet your needs.

To find which water treatment solution is best for you, first evaluate your water quality.

- It is the sole responsibility of the owner/operator/purchaser of equipment to verify that the incoming water supply is comprehensively tested and complies with the published water quality standards from Alto-Shaam shown below. Non-compliance with these minimum standards will potentially damage equipment and/or components and void the original equipment manufacturer's warranty.
- Please note: A water test kit is available to purchase from Alto-Shaam, KT-48103. Water is self-collected and sent to an independent laboratory.

## Alto-Shaam Water Quality Standards

| INLET WATER REQUIREMENTS        |                          |                          |  |
|---------------------------------|--------------------------|--------------------------|--|
| Contaminant                     | Treated Water            | Untreated Water          |  |
| Free Chlorine                   | Less than 0.1 ppm (mg/L) | Less than 0.1 ppm (mg/L) |  |
| Hardness                        | ss 30-70 ppm 30-70 pp    |                          |  |
| Chloride                        | Less than 30 ppm (mg/L)  | Less than 30 ppm (mg/L)  |  |
| рН                              | 7.0 to 8.5               | 7.0 to 8.5               |  |
| Silica                          | Less than 12 ppm (mg/L)  | Less than 12 ppm (mg/L)  |  |
| Total Dissolved<br>Solids (tds) | 50-125 ppm               | 50-360 ppm               |  |

Once water quality has been determined and compared to Alto-Shaam's water quality standards, choose applicable water treatment—a reverse osmosis or water filtration system.

## What's the difference?

| Contaminant               | Reverse Osmosis | Water Filtration |
|---------------------------|-----------------|------------------|
| Sediment                  | <b>&gt;</b>     | <b>~</b>         |
| Free Chlorine             | <b>&gt;</b>     | <b>✓</b>         |
| Chloramines               | <b>&gt;</b>     | <b>✓</b>         |
| Hardness                  | <b>&gt;</b>     | ×                |
| Chlorides                 | <b>&gt;</b>     | ×                |
| pH                        | <b>~</b>        | ×                |
| Silica                    | <b>~</b>        | ×                |
| Total Dissolved<br>Solids | <b>~</b>        | ×                |

### Items to consider:

- Chlorides cause corrosion.
   It is recommended that any water quality over 30ppm [mg/L]
   purchase a reverse osmosis system.
- Total Dissolved Solids (TDS) cause scale, which is not removed by water filtration.

## **Reverse Osmosis**

Reverse osmosis systems are the preferred solution for treatment of water that contains sediments, chlorides, minerals, and other total dissolved solids (TDS). They also remove chlorine and chloramines—corrosive disinfectants often added by public water treatment plants to minimize water-related diseases.

## Why reverse osmosis?

- Elimination of labor and costs associated with frequent oven maintenance
- Reduction of corrosion on stainless steel
- Reduction of scale build up
- Protection of equipment
- Full water treatment

| SPECIFICATIONS                   |                   |                                    |  |
|----------------------------------|-------------------|------------------------------------|--|
| RO Model Tank Dimensions (H x W) |                   | Wall Mounted System<br>(H x W x D) |  |
| 5 Gallon                         | 20-1/4" × 12-1/4" | 20" × 18-3/10" × 6"                |  |
| 10 Gallon                        | 23-1/4" x 15-5/8" | 20" × 18-3/10" × 6"                |  |
| 16 Gallon                        | 30-3/8" x 15-5/8" | 20" x 18-3/10" x 6"                |  |

## **Model Selection**

Alto-Shaam's product offering includes three [3] different sized reverse osmosis systems for use on combination or Converge multi-cook combi ovens. Please reference the guidelines below for model (reverse osmosis system and tank reservoir) selection.

| COMBINATION OVENS           |             |         |  |
|-----------------------------|-------------|---------|--|
| Oven Model<br>(CTX/PRODIGI) | RO<br>Model | Part #  |  |
| 4-10                        | 5 Gallon    | 5031203 |  |
| 6-10                        | 5 Gallon    | 5031203 |  |
| 10-10                       | 5 Gallon    | 5031203 |  |
| 7-20                        | 5 Gallon    | 5031203 |  |
| 10-20                       | 10 Gallon   | 5031204 |  |
| 20-10                       | 10 Gallon   | 5031204 |  |
| 20-20                       | 10 Gallon   | 5031204 |  |
| 4-10 over 4-10              | 10 Gallon   | 5031207 |  |
| 6-10 over 6-10              | 10 Gallon   | 5031207 |  |
| 6-10 over 7-20              | 10 Gallon   | 5031207 |  |
| 6-10 over 10-10             | 16 Gallon   | 5031208 |  |
| 7-20 over 7-20              | 16 Gallon   | 5031208 |  |

| CONVERGE MULTI-COOK COMBI OVENS |             |         |  |
|---------------------------------|-------------|---------|--|
| Oven Model<br>(CMC)             | RO<br>Model | Part #  |  |
| H2H                             | 5 Gallon    | 5031203 |  |
| НЗН                             | 5 Gallon    | 5031203 |  |
| H2H over H2H                    | 10 Gallon   | 5031207 |  |
| H3H over H2H                    | 10 Gallon   | 5031207 |  |

Sizing recommendations are based on an average usage of water not exceeding 175 gallons per day and line water pressure at point of equipment at 50°F, 60 psi. If daily water usage or supply pressure/water to the equipment deviates from these values or oven operates in heavy steam applications, additional reservoir sizing may be needed to ensure continuous treated water supply to the appliance.

#### **Details**

Each reverse osmosis system contains two water treatment filters, one reverse osmosis membrane and one mineral addition cartridge. Please reference the manual for additional required parts. All installation materials used outside of Alto-Shaam specifications will void equipment warranty. Install kits are available for all models for seamless installation.

## **Water Filtration**

Water filtration systems ensure Alto-Shaam equipment is supplied with higher quality water. Extend equipment lifetime and reduce oven downtime associated with sediments, chlorine, and chloramines typically found in water.

## Why water filtration?

- Elimination of labor and costs associated with frequent oven maintenance
- Protection of equipment

### **Model Selection**

| Oven Model [CTX/CMC/PRODIGI] | Filter Model       | Part #  |
|------------------------------|--------------------|---------|
| 4-10                         | QTI1+CR            | 5037355 |
| H2H                          | QTI1+CR            | 5037355 |
| НЗН                          | QTI1+CR            | 5037355 |
| Stacked Converge Ovens       | QTI1+CR + FT-48710 | 5037376 |
| 6-10                         | QTI1+CR            | 5037355 |
| 10-10                        | QTI1+CR            | 5037355 |
| 7-20                         | QTI1+CR            | 5037355 |
| 10-20                        | QTI1+CR            | 5037355 |
| 20-10                        | QTI1+CR            | 5037355 |
| 20-20                        | QTI1+CR            | 5037355 |
| Stacked Prodigi Ovens        | QTI1+CR + FT-48710 | 5037376 |



The QTI1+CR is a dual-cartridge water treatment system with two Qwik-Twist cartridges, one with activated carbon and the other catalytic carbon. Please reference the manual for additional required parts as hardware for mounting to a wall and connection hoses are *not included*. All installation materials used outside of Alto-Shaam specifications will void equipment warranty. Install kits are available for all models for seamless installation.

Please note: Life expectancy of filters varies based on water quality. Filter replacement

is recommended every 6 months, sooner with any of the following conditions: [1] when pressure gauge needle enters the red zone on the outlet gauge, [2] when rated gallons are at capacity, [3] when water flowing to Alto-Shaam equipment fails to meet minimum flow requirements on specification sheet.

## Replacement Parts and Kit

| Model    | Quantity | Description                | Part #    |
|----------|----------|----------------------------|-----------|
| CTO-Q10  | 1        | Pre/post filter            | 300-05828 |
| CTOS-QCR | 1        | Chloramine filter          | 300-05832 |
| FT-48710 | 1        | 3/4" MNPT fitting, snap-in | FT-48710  |
| HO-36870 | 1        | Hose, 3/4" NPT, 6'         | HO-36870  |
| KT-48103 | 1        | Water test kit             | KT-48103  |



## **Model Specifications**

### **Overall Dimensions**

23.3" L x 14.3" W x 4.8" D [59.2 cm x 36.3 cm x 12.2 cm]

#### **Connections**

Inlet Connection: 3/4" MNPT Outlet Connection: 3/4" MNPT

### **Operating Pressure**

30 - 90 psi [2.1 - 6.2 bar]

#### **Water Temperature**

35° - 100°F [2 - 38°C]

### **Operating Weight**

18 lbs [3.62 kgs]

#### **Shipping Weight**

9 lbs (5.4 kgs)

### **Electrical Connection**

None required