

Target Keyword: Water filters vs. Complete Water Treatment System

Page Title: Water filters vs. a Complete Water Treatment System: what you need to know to ensure your food service facility is set up correctly

When you're in the process of setting up a new food service facility, restaurant, or coffee bar, one of the biggest decisions that you have to make is choosing between a water filter and a complete water treatment system. The good news is that many water companies carry both options and offer a range of choices at varying price points. You'll be able to get a comprehensive overview of all of your choices so that you can make an informed decision. So, let's do a quick overview on water filters vs. a complete water treatment system.

Water filters

Water filtration takes the impurities out of a given water source. When water is passed through a media bed, the particles (i.e., sediment, chlorine) become trapped, allowing the water to become purified.¹ Consider both the level and type of impurities that exist in the water. Sometimes a larger filtration system must be installed at the point of entry in order to treat the issue properly.

As you weigh your options, look for filtration systems that feature carbon steel pressure vessels, an automatic backwash operation, self-adjusting flow control, and a PVC media-retaining under drain distribution system.² Many companies also offer optional features with everything from chemical pre-dosing injection equipment to inlet/outlet pressure gauges to steam or hot water sanitized systems.

Just a few of the most popular water filters on the market today include the following:

- *Active carbon filters*, specifically granular activated carbon (GAC) filters, which take chlorine and additional aromas and tastes from the water³
- *Iron removal filters*, which are capable of decreasing iron, hydrogen sulfide, and manganese through manganese greensand filter media⁴
- *Neutralization filters*, in which calcite is screened and crushed to neutralize low or acidic pH water⁵

Reverse osmosis systems

Reverse osmosis (RO) systems are considered to be one of the most efficient and cost-effective methods for producing drinking water with a great taste. As such, it is not surprising that they are quite commonplace in the food service market. Many bottled water companies use reverse osmosis to purify their water before they bottle it.⁶ With the option for central installation, there are numerous applications for reverse osmosis from coffee makers to ice machines.

Typically water is 96 to 98 percent free of dissolved minerals, which makes it more “aggressive” than water that has not undergone this process. However, when a RO unit has a re-mineralization device or a mixing system that decreases the lower pH effect, it can be a great option.

As you select a reverse osmosis system for your restaurant or coffee bar and are considering different sizes, think about the following factors:

- Initial water draw (i.e., some steamers need a few gallons of water to fill a steam chamber)
- Peak operation periods
- The food and/or beverages being served by the RO
- Makeup water⁷

Keep in mind that water temperature can play a role in the reverse osmosis process. In order to compensate for seasonal variations, choose a size on the higher end.

[1http://www.corriganwater.com/commercial-water-filtration.php](http://www.corriganwater.com/commercial-water-filtration.php)

[2https://www.marlo-inc.com/products/water-filtration-systems/mfs-series](https://www.marlo-inc.com/products/water-filtration-systems/mfs-series)

[3http://www.watertechonline.com/articles/first-on-your-menu-treating-restaurant-water](http://www.watertechonline.com/articles/first-on-your-menu-treating-restaurant-water)

[4https://www.marlo-inc.com/products/water-filtration-systems/mfs-series](https://www.marlo-inc.com/products/water-filtration-systems/mfs-series)

[5https://www.marlo-inc.com/products/water-filtration-systems/mfs-series](https://www.marlo-inc.com/products/water-filtration-systems/mfs-series)

[6http://www.corriganwater.com/commercial-water-filtration.php](http://www.corriganwater.com/commercial-water-filtration.php)

[7http://www.watertechonline.com/articles/first-on-your-menu-treating-restaurant-water](http://www.watertechonline.com/articles/first-on-your-menu-treating-restaurant-water)

Target Keyword: Types of water treatment systems for restaurants

Page Title: Types of water treatment systems restaurants need to incorporate into their industrial kitchen plans

Three of the major priorities in the restaurant industry today are providing added value, decreasing operational costs, and promoting environmental awareness. One critical area of operation that allows restaurants to meet all three of these goals is with water.¹ Appliances that use water, such as coffee makers and ice machines, cost a significant amount of money for any restaurant. It is vital for a restaurant to have high quality water for both food preparation and beverage dispensing. As such, it is not hard to understand why a considerable amount of research goes into types of water treatment systems for restaurants before any final decision is made.

Activated carbon filters

For many years, activated carbon filters have been an effective method for reducing chlorine and taking additional odors and tastes out of water. Typically, a granular activated carbon (GAC) reduces both odor and taste successfully. These filters are not expensive and have a large capacity for providing high quality water. Commercial systems are available that can provide up to 250,000 gallons of water with 85 percent chlorine reduction.²

GAC filters take care of many of the common issues that arise with water, but in some cases, the fine particulates still need to be reduced. Most commercial systems have microfiltration capacity, which filters particulates and amoebic cysts down to 0.5 microns.³ One of the most frequently used GAC filters with microfiltration is the carbon block filter. Each carbon block filter has a micron rating that coincides with removal capacity.

Additional “pre-coat” filters

There are other types of “pre-coat” filters available that reduce taste and odor and take care of sub-micron filtration all within a single unit. These cartridge filters have a sanitary design that prevents contamination during cartridge changes, a powdered carbon coated septum, and a maximum capacity of 9,000 gallons from a single filter.⁴

Hollow-fiber filters or membranes

Many restaurants opt for newer types of water treatment systems for restaurants, such as systems that use hollow-fiber filters or membranes to complete sub-micron filtration. In addition to the hollow-fiber filters, these systems also have GAC filters to combat negative odors and tastes. The systems can provide as much as 200,000 gallons of high quality water.⁵ Some systems even integrate an auto-flushing system to take care of particulate build up and loss of pressure.

While taste and odor are the most common water issues that restaurants encounter, there are a number of other water quality problems that can occur

including alkalinity, high totally dissolved solids (TDS), hazardous chemicals, and hardness.⁶ All of these issues necessitate additional treatment measures.

It is also important to keep in mind that hot water or steaming devices and ice machines require specialized treatment because they involve water going through a phase change. When water changes from a liquid into a vapor (steam) or solid ice), dissolved minerals, or scale, is left behind. Scale must be decreased or even removed completely.

1<http://www.wqpmag.com/water-restaurants>

2<http://www.watertechonline.com/articles/first-on-your-menu-treating-restaurant-water>

3<http://www.watertechonline.com/articles/first-on-your-menu-treating-restaurant-water>

4<http://www.watertechonline.com/articles/first-on-your-menu-treating-restaurant-water>

5<http://www.watertechonline.com/articles/first-on-your-menu-treating-restaurant-water>

6<http://www.watertechonline.com/articles/first-on-your-menu-treating-restaurant-water>

Target Keyword: Choosing the right size water treatment systems for the right machine

Page Title: Choosing the right size water treatment systems for the right machine

Are you in the process of opening up a new food service facility, restaurant, or coffee bar? As you research the equipment that you will need, you must familiarize yourself with choosing the right size water treatment system for the right machine. From coffee machines to water dispensers to bar guns to steam ovens, there are multiple pieces of equipment in a restaurant that require proper water treatment to ensure that the facility meets sanitary regulations.

Choosing the right size water treatment system for the right machine guarantees that your food will be prepared with high quality water and that your beverages will have pleasing aromas and tastes.¹ As you research restaurant equipment, consider the following factors for size.

Production time / speed

How fast do you need a given piece of equipment to be? Run the numbers for your business and be realistic about your needs. You don't want to purchase something that is complete overkill, but you also don't want to face an upgrade in a matter of a few months or even a few years. Restaurant equipment is expensive. You want your purchases to meet the demands of your food service facility for many years to come.

For example, a small establishment may only brew 50 espressos a day. In comparison, there are large establishments that may need to brew 70 espressos an hour just to keep up with their demand. There is no need for the smaller facility to purchase a machine that brews 70 espressos an hour unless they are planning to expand significantly in the near future.

Power

On a similar note, you must be honest about the amount of capacity that your facility requires when you consider the power of a given piece of equipment. It is best practice to shoot for the middle of a range. For example, if you need to brew 30 espressos an hour, select a machine with a range of 20 to 40.

Flexibility

Different equipment allows for different levels of flexibility. For example, how many chefs are going to be cooking dishes in a steam oven at a given time? How many servers are going to be filling drinks from the beverage dispensers and coffee makers? You want to make sure that you have ample space for people to meet the demands of the customers.

The bottom line is that when it comes to restaurant equipment, size can make a big difference. The size of a single espresso machine or ice maker can mean more sales and loyal customers. For example, when a coffee bar has a two group espresso machine as opposed to a one group machine, customers are likely to be impressed because they'll view the bar as being more professional than the one on the other side of town that has a one group machine.² Power and presence may not play as big a role with equipment that is not visible to the public, but it is always something to keep in mind.

So, what are your needs when it comes to choosing the right size water treatment system? How can OptiPure help?

[1http://www.watertechonline.com/articles/first-on-your-menu-treating-restaurant-water](http://www.watertechonline.com/articles/first-on-your-menu-treating-restaurant-water)

[2http://www.espressotec.com/commercial-buying-guide](http://www.espressotec.com/commercial-buying-guide)

Target Keyword: Coca-Cola free-style machines require treatment systems
Page Title: Coca-Cola free-style machines require treatment systems (chloramines required to be removed)

The Coca-Cola Freestyle machine has rapidly become one of the most sought after pieces of equipment in restaurants across the United States and even in a few international markets. There is nothing quite like it available right now when it comes to self-serve drink machines. Typically, a beverage system has six to eight drink selections. The Freestyle machine features a user-friendly touchscreen with over 100 individual brands. Some of these options are not available anywhere but in Freestyle machines, such as Diet Raspberry Coke, Fanta Zero Peach, and Coke Zero with Orange.¹

How does it work?

So how is Coca-Cola able to fit so many drinks into a single machine? Conventional self-serve beverage systems contain large five-gallon bags or boxes of pre-mixed syrup.² In comparison, the Freestyle machine has small cartridges with concentrated 46-ounce ingredients that enable a significantly larger number of options, all from a single dispenser.³ A single machine can house all of the cartridges effortlessly.

The machine is equipped with RFID tag technology that notifies restaurant owners when brands are running low and must be replaced. The Freestyle machine is also able to send a host of data metrics to Coca-Cola including the popular flavors, when and how much people are purchasing, and which locations are frequented the most.⁴

The success

Users love the sleek inviting design of the Coca-Cola Freestyle machines. They appreciate that the machines are easy to use, have engaging digital displays, and offer a wide range of beverage brands. Every drink selection features great taste, intense beverage aroma, and an ideal level of carbonation. The entire process is fun and enjoyable, adding a unique element to any dining experience.

In turn, businesses love the Freestyle machines because they have increased beverage sales and brought in higher numbers of diners.

Chlorine / chloramine treatment

Did you know that Coca-Cola Freestyle machines require treatment systems? As of July 2013, Coca-Cola has approved the CLM filtration system to be one of the required filtration systems for the Freestyle machines. CLM stands for chloramine. When the active ingredient in chlorine bleach reacts with ammonia, chloramine is created. Chloramines have been proven to offer heightened protection against water system bacterial growth.

Chloramines can negatively affect the odor and taste of the water, and, consequently, compromise water applications over an extended period of time. According to the machine specifications, Coca-Cola Freestyle machines require treatment systems in order to take out all odor and taste. Sediment must be removed completely, and the chlorine/chloramine levels must be under 0.5ppm.⁵

Are you still not sure whether a CLM system is a good fit for your Coca-Cola machine? Consider the following benefits of CLM systems:

- Decreases chlorine, chloramines, and additional hazardous substances that negatively affect a beverage's odor and taste
- The sub-micron technology decreases particles and dirt to less than 0.5 in size
- Improves the taste of the beverages
- Maintains optimal carbonation
- Offers protection from corrosion, clogging, and tough wear for the system's pumps, seals, tubes, and small spaces⁶

When it comes time for you to select a beverage machine, you may want to consider a Coca-Cola free-style machine. And of course, if you have questions, we'd love to help answer them.

[1<http://www.coca-colacompany.com/stories/everything-you-need-to-know-about-coca-cola-freestyle>](http://www.coca-colacompany.com/stories/everything-you-need-to-know-about-coca-cola-freestyle)

[2<http://www.popsci.com/scitech/article/2009-07/coca-cola-freestyle-most-advanced-soda-fountain-ever>](http://www.popsci.com/scitech/article/2009-07/coca-cola-freestyle-most-advanced-soda-fountain-ever)

[3<http://www.coca-colacompany.com/stories/everything-you-need-to-know-about-coca-cola-freestyle>](http://www.coca-colacompany.com/stories/everything-you-need-to-know-about-coca-cola-freestyle)

[4<http://www.popsci.com/scitech/article/2009-07/coca-cola-freestyle-most-advanced-soda-fountain-ever>](http://www.popsci.com/scitech/article/2009-07/coca-cola-freestyle-most-advanced-soda-fountain-ever)

[5http://www.filterpure.com/blog/2013/07/30/coke-freestyle-everpure/](http://www.filterpure.com/blog/2013/07/30/coke-freestyle-everpure/)

[6http://www.filterpure.com/blog/2013/07/30/coke-freestyle-everpure/](http://www.filterpure.com/blog/2013/07/30/coke-freestyle-everpure/)