



WATER BASICS

Water is the main ingredient in prepared beverages and a vital part of any foodservice program. In many countries, water is treated to make it potable, but the resulting formula is not necessarily ideal for preparing quality beverages. BUNN is your partner in evaluating commercial foodservice water specifications in three categories:



FORMULA

Disinfectants such as chlorine and chloramines are usually added by governing authorities to make water safe for drinking. Less priority is placed on the overall taste and clarity of the supply. These additives impact what is referred to as your water "formula" and can affect the final taste and appearance of prepared beverages.

QUALITY



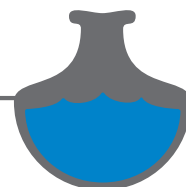
Sixty percent of beverage equipment failures are due to water quality. Once the characteristics of your water are known, it can be determined if a commercial-grade filtration system is necessary to treat the incoming water supply to ensure optimal flavor and help prevent unnecessary equipment service costs.



DEDICATED DISPENSERS

The convenience of a dedicated hot water dispenser can aid in quality beverage preparation and also offer the added benefit of increasing overall employee and kitchen operational efficiency.

KNOW YOUR WATER



A quality beverage program must begin with quality water. Many of us take tap water for granted because it is readily available from any faucet. Optimal water for preparing beverages is clear, odorless and good tasting but the natural incoming supply does not always start that way. A shrewd foodservice operator will dedicate as much time getting to know the characteristics of the local water supply as the origin of selected coffee beans or tea leaves.





SEDIMENT

Water often contains small, suspended particles such as sand grains and organic matter that are invisible to the human eye. High levels of these sediments can detract from the appeal of brewed beverages and can clog beverage equipment affecting its performance and increasing service costs. **Simple Test:** Hold a clear glass of water up to the light. It should appear crystal clear. If tiny particles or tints of color appear, the water may have a high level of sediment.

OFF TASTE AND ODORS



Disinfectants can give water a bitter taste and a strong odor. Other tastes and odors such as "rotten egg" or musty smell result from naturally occurring elements and minerals in both tap and well water. Achieving tasteless and odorless water is key for consistently high beverage quality. **Simple Test:** Draw a glass of water directly from the tap. Immediately smell it, and take a sip. If an off taste or odor is detected, the water may have a quality problem.



LIME SCALE

Natural minerals in water are the cause of lime scale deposits in beverage equipment. Excessive lime scale deposits will affect the performance of heating elements, reduce the volume of water in heating tanks and clog tubing which can result in higher service maintenance bills and energy bills. **Simple Test:** Check the hot water faucet or sprayhead on equipment for white lime scale deposits. The presence of lime scale indicates high mineral levels.

ENSURING QUALITY WATER

Installing water filtration or conditioning equipment can help minimize or eliminate problems associated with a less than optimal water supply. BUNN is your partner in navigating the advances of water filtering technology.

| SEDIMENT FILTERS | CARBON FILTERS | INHIBITOR FILTERS | ION EXCHANGE SYSTEMS |
|---|--|---|---|
| Traps debris in tap water such as dirt, rust flakes and sand | Helps to improve taste and odor of beverages by oxidizing the surfaces of carbon particles so they can attract and hold organics | Does not correct water hardness but reduces the effects by sequestering lime-forming minerals in water. | These "water softeners," exchange calcium and magnesium in the water for sodium. They are effective in reducing or nearly eliminating water hardness. However, "softened" water can cause overflow in coffee filter brew systems (iced tea actually loves softened water) and water taste may be altered as well. |
| Not intended to correct water hardness or taste and odor problems | Not intended to correct water hardness | Not intended to correct taste or odor problems | |

TOTAL DISSOLVED SOLIDS

In the course of its journey into your beverage, water attempts to dissolve everything that comes in contact with it, while adding those dissolved items to its own composition. Total Dissolved Solids, or TDS, is an important factor in your water formula. Essentially, TDS is everything present in water other than pure H₂O and suspended solids, such as sediment. A range of meters and readers are available to determine your local TDS level, or your BUNN representative can assist in determining this level. Some level of TDS is desired, depending on the application. However, water with high TDS levels can affect taste of beverages and cause deposits in equipment. For best results, water should be within the following recommendations for parts per million (ppm) in TDS:

Overall: Below 300 ppm

Water and coffee:

50-100 ppm or 3-6 grains of hardness

Water and tea:

17-50 ppm or 1-3 grains of hardness



WATER HARDNESS

Water hardness is determined by measuring the mineral content, specifically calcium and magnesium. Hard water has a high mineral content. Some mineral content is preferred to create great tasting beverages. However, high levels of calcium carbonate can cause adverse effects on equipment by leaving lime scale deposits. A credit card thickness of lime can create a 30% energy deficiency in equipment!

To illustrate the meaning of the term "grains of hardness", imagine the following example: 1 gallon (3.8L) of water containing 5 grains of hardness contains lime scale equal in size to an aspirin tablet.

Water hardness is the most commonly mapped water characteristic. Consult your local water authority for specific formula details available in your geographic area.

BUNN WATER FILTRATION SOLUTIONS. BUILT BY SCIENCE. BACKED BY EXPERTISE.

Water is the essential component of any prepared beverage and is even represented in the BUNN logo with the blue pie shape – the alchemic symbol for water. Although water is treated around the world to make it potable, it may not be ideal for producing quality beverages and protecting beverage equipment.

BUNN is the partner you can count on to manage your water filtration program backed by a full portfolio of innovative beverage equipment and customizable, professionally-managed service programs across all beverage platforms. This total-service solution improves operational efficiency to ensure repeat business and quality in every cup.

BUNN has solutions for common water problems

| SYMPTOMS | PROBLEM | SOLUTION |
|---|---------------------|--|
| <ul style="list-style-type: none">• Chlorine Smell• Musty Smell• Unpleasant Smell | Off taste and odors | Any standard BUNN EQHP, WEQ or WQ filter can help resolve taste and odor issues and remove sediment from water. |
| <ul style="list-style-type: none">• Cloudy Water• Visible Sediment | Sediment | |
| <ul style="list-style-type: none">• White or discolored deposits on faucets or within pipes | Lime Scale | BUNN Scale-Pro encapsulates the minerals which cause lime scale. |
| <ul style="list-style-type: none">• Salty or Brackish Taste• Alkaline Taste | High TDS | Reverse Osmosis filters can help with high TDS levels. Contact a BUNN representative for customized solutions to reduce overall TDS. |

Learn more and browse our water filtration solutions here



All Easy Clear Systems are manufactured with U.S. Standard Pipe Thread

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