



WATER THAT MEANS BUSINESS

Commercial Foodservice Water Solutions

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WATER IS YOUR SINGLE MOST IMPORTANT INGREDIENT

- ▶ Whether chilled, iced, brewed, boiled or steamed, water is a factor in the quality of your food and beverages.
- ▶ Across multiple visits or at different locations, consistent quality and taste are what attract your customers.



WATER IS YOUR SINGLE MOST IMPORTANT INGREDIENT

- ▶ **Pentair has set the standard for foodservice water quality for over 85 years.**
- ▶ With the breadth and depth of our water quality products and our unmatched water management expertise, we can help you protect your foodservice operation, whatever your size or segment.



PENTAIR EVERPURE












- ▶ Point-of-use filtration
- ▶ Reverse osmosis (RO)
- ▶ Point-of-entry filtration
- ▶ Point-of-entry water softening
- ▶ Ultrafiltration systems

Of over 800 foodservice equipment suppliers, customers rank Pentair® Everpure™ in the top 20.



WATER TREATMENT EVERYWHERE YOU NEED IT



-  Ice
-  Water boost
-  Steam
-  Fountain
-  Coffee
-  Espresso
-  Tea
-  Drinking water
-  Combination systems
-  Softening
-  Warewashing

DRINKING WATER THAT MAKES A CLEAR FIRST IMPRESSION



DRINKING WATER CAN MAKE OR BREAK A CUSTOMER'S VISIT



- ▶ Algae blooms can cause earthy or moldy tastes and odors.
- ▶ Tannins can cause yellow or brown coloration and bitter tastes.
- ▶ Pollutants such as lead, trihalomethanes and VOCs can affect health.
- ▶ Bacteria, viruses and parasites like *Cryptosporidium* and *Giardia* cysts can cause illness.
- ▶ Dirt can cause bubbles to form on the inside surface of glassware.
- ▶ Chlorine can give water a “swimming pool” taste and odor.





DRINKING WATER SOLUTIONS



PENTAIR EVERPURE MC²

Improve taste and odor while protecting against disease-causing *Cryptosporidium* and *Giardia* cysts with precoat submicron technology that reduces dirt and particles as small as 1/2 micron in size.

PENTAIR EVERPURE 4FC-L

Improves taste even at full flow. Everpure Fibredyne™ technology. Reduces lead and disease-causing cysts. Provides bacteriostatic control and reduces microbial growth.

PENTAIR EVERPURE MICROGUARD™

Delivers premium quality drinking water for main-fed coolers and drinking fountains while reducing 99.9999% of bacteria, asbestos and disease-causing cysts.

GREAT-TASTING
FOUNTAIN BEVERAGES
START WITH GREAT WATER



FOUNTAIN BEVERAGES ARE 87% WATER



- ▶ High total dissolved solids (TDS) can cause weak carbonation and soft ice.
- ▶ Chlorine can give fountain drinks a “swimming pool” taste and odor.
- ▶ Algae blooms can cause earthy or moldy tastes and odors.
- ▶ Chloramines react with sweeteners to form compounds that amplify chlorine and ammonia tastes and odors.

Water high in TDS clogs beverage fountain filters and throws off Brix ratios, requiring more syrup and more frequent filter replacement.

CHLORAMINES CAN DAMAGE FOUNTAIN EQUIPMENT



- ▶ Chloramines are a combination of chlorine and ammonia used to treat drinking water as an alternative to chlorine.
- ▶ They can damage gaskets and O-rings, but standard carbon filters cannot easily remove chloramines because there isn't enough carbon or contact time.

As of 2017, an estimated **20%** of municipalities used chloramines as their primary disinfectant.*



*American Water Works Association, 2018



FOUNTAIN BEVERAGE SOLUTIONS



PENTAIR EVERPURE 7FC

Exclusive Fibredyne™ II submicron carbon block technology provides superior chlorine taste & odor reduction and micro-filters dirt and particles as small as 0.2* micron in size by mechanical means.

PENTAIR EVERPURE MC²

Precoat submicron technology reduces dirt and particles as small as 0.2 micron in size while Micro-Pure® II filtration media inhibits bacteria growth that can decrease filter lifespan.

PENTAIR EVERPURE 7CLM⁺

Superior chloramine reduction in a quick-change system approved by major soft drink manufacturers; fits existing QC heads.



**KEEP COFFEE CUSTOMERS
COMING BACK**



COFFEE IS 98.7% WATER



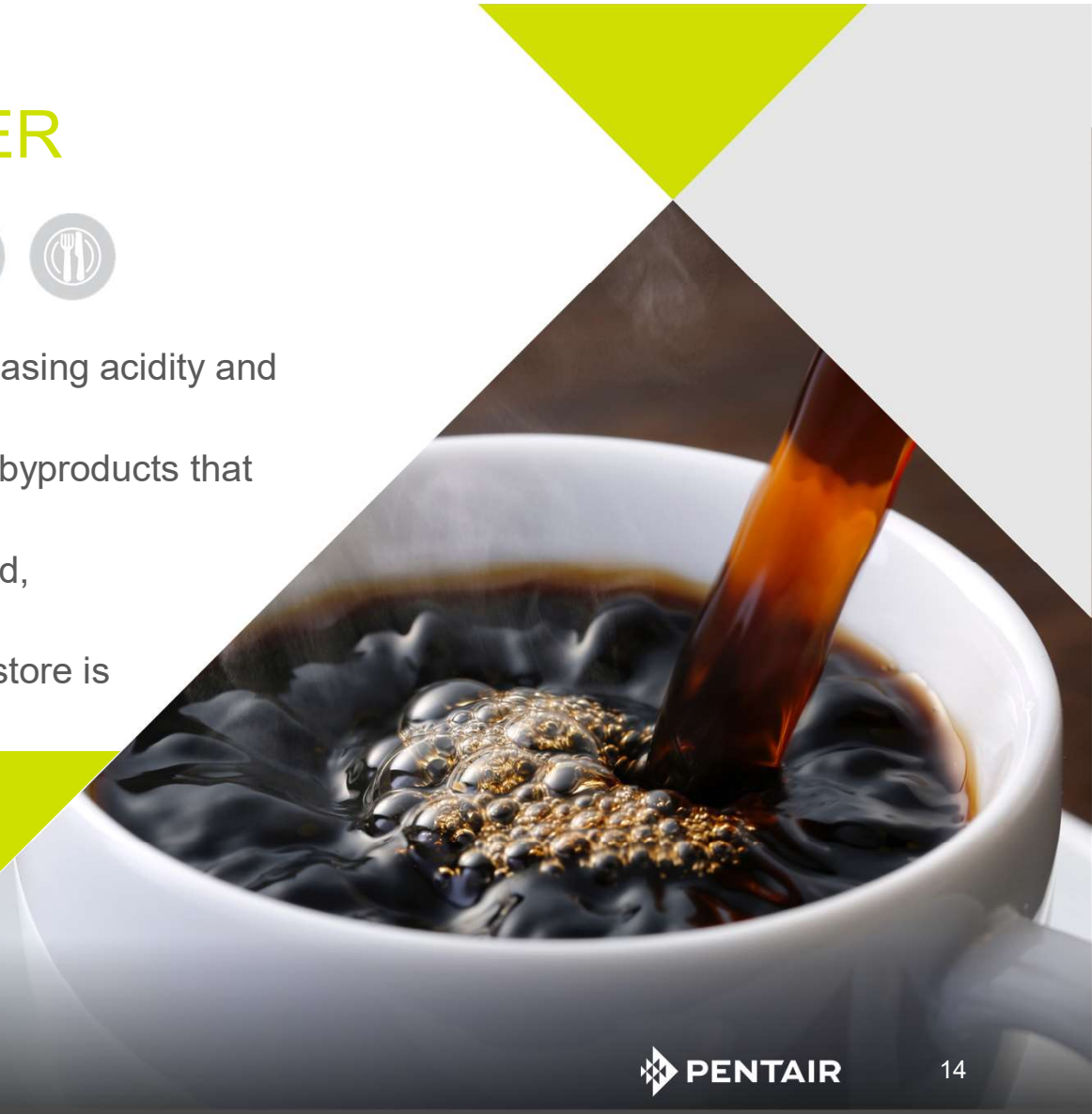
- ▶ Chlorine impacts aroma and taste by increasing acidity and oxidizing aromatics.
- ▶ Chlorine can bond with organics to create byproducts that can add moldy flavor tones.
- ▶ Hard water causes extra oils to be released, leaving a film on the coffee surface.
- ▶ Consistency from cup to cup and store to store is what keeps customers coming back.

Low TDS water

Too many coffee oils and tea tannins = bitter, oily flavor.

High TDS water

Too few coffee solids and tea flavonoids = weak flavor.



WATER QUALITY IMPACTS EQUIPMENT

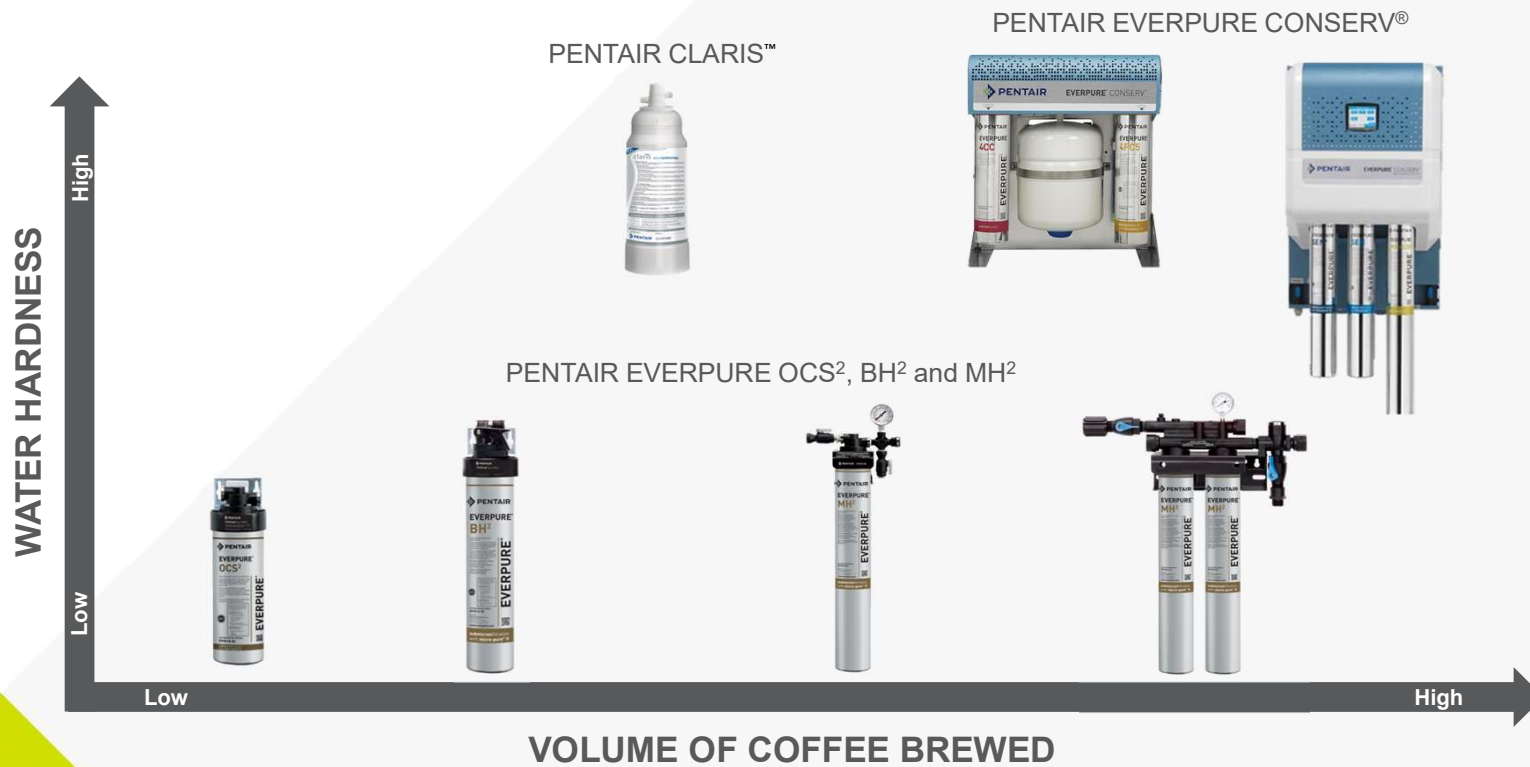


- ▶ Corrosion from chlorine and chlorides attacks metals, disintegrating parts and causing rust-like buildup on surfaces.
- ▶ Hardness scale on elements can increase energy usage by up to 40%.*
- ▶ Scale can cause probes and floats to malfunction, causing short pots or leaks.



* Scale Deposits and Efficiency Loss Johnston Boiler, 2020

COFFEE SOLUTIONS





COFFEE SOLUTIONS



PENTAIR EVERPURE MH²

Easy to install and low maintenance, with unique precoat technology that provides superior filtration and scale control.

PENTAIR CLARIS

Combined filtration and ion exchange; DUOBLEND™ bypass valve puts you in control of the water recipe by tailoring the mineral blend.

PENTAIR EVERPURE CONSERV

High-efficiency RO to reduce TDS and other contaminants while minimizing water waste.



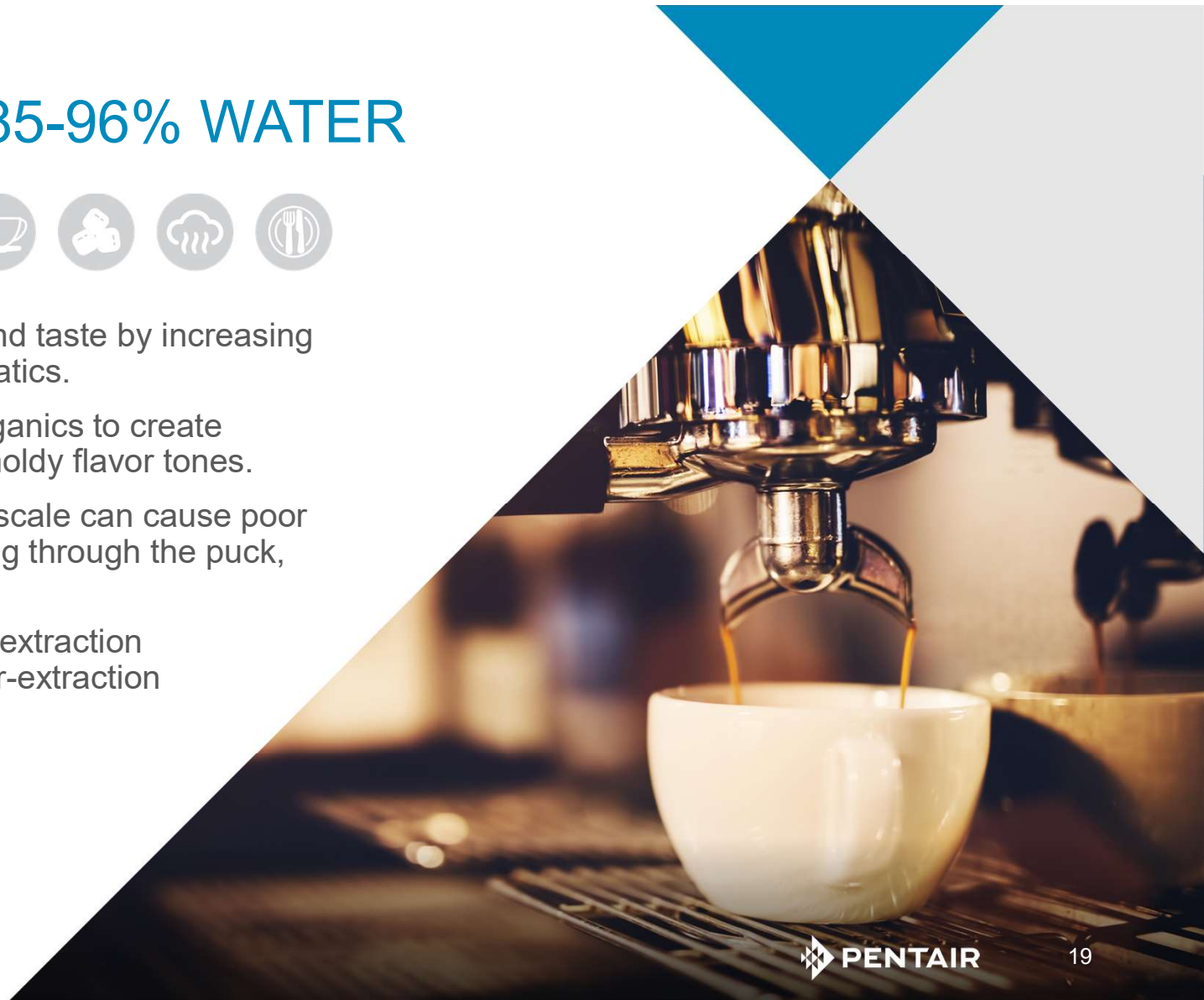
**EXCEPTIONAL WATER MAKES
EXCEPTIONAL ESPRESSO**



ESPRESSO IS 85-96% WATER



- ▶ Chlorine impacts aroma and taste by increasing acidity and oxidizing aromatics.
- ▶ Chlorine can bond with organics to create byproducts that can add moldy flavor tones.
- ▶ Reduced pressure due to scale can cause poor pre-infusion and channeling through the puck, leading to weak drinks.
- ▶ TDS can cause the under-extraction of essential oils or the over-extraction of bitter oils.



POOR WATER QUALITY IS A THREAT TO EXPENSIVE ESPRESSO EQUIPMENT



- ▶ Scale on components can lower the temperature and limit flow, causing poor extraction and reducing steam for frothing.
- ▶ Chlorides can attack stainless steel, forming rust-like buildup and holes that lead to leaks and loss of pressure.
- ▶ Corrosion can damage copper boilers.
- ▶ Scale damage can require replacement of heating elements.



ESPRESSO SOLUTIONS



PENTAIR EVERPURE EOS



1-100



101-150



151-300

EVERPURE CONSERV



PENTAIR CLARIS



<50



51-100



101-150



151-300



301-500

Low

High

SHOTS PER DAY



ESPRESSO SOLUTIONS



PENTAIR EVERPURE ESO⁷

Low-cost three-in-one system for filtration, scale prevention and buffering that retains enough minerals to bring out espresso flavors.

PENTAIR CLARIS

Combined filtration and ion exchange; DUOBLEND™ bypass valve puts you in control of the water recipe by tailoring the mineral blend.

PENTAIR EVERPURE CONSERV

High-efficiency RO to reduce TDS and other contaminants while minimizing water waste.



BREWING THE PERFECT CUP OF TEA



TEA IS 99% WATER



- ▶ Chlorine impacts aroma and taste by increasing acidity and oxidizing aromatics.
- ▶ Mineral hardness can cause cloudy tea by preventing tannins from dissolving properly.
- ▶ Over-extraction of flavonoids and tannins caused by TDS can leave oily films.
- ▶ Under-extraction caused by TDS can lead to weak color and flavor.

Scale can cause improper brewing temperatures:

- ▶ Too high and tea will taste burnt and bitter.
- ▶ Too low and the tea's complex flavors won't emerge.

* Scale Deposits and Efficiency Loss Johnston Boiler, 2020



POOR WATER NEGATIVELY AFFECTS BREWING EQUIPMENT



- ▶ Corrosion from chlorine and chlorides attacks metals, disintegrating parts and causing rust-like buildup on surfaces.
- ▶ Hardness scale on elements can increase energy usage by up to 40%.*
- ▶ Scale can cause probes and floats to malfunction, causing short pots or leaks.



* Scale Deposits and Efficiency Loss Johnston Boiler, 2020



TEA SOLUTIONS



PENTAIR CLARIS

Combined filtration and ion exchange that removes carbonate hardness and lowers alkalinity for outstanding scale prevention.

- ▶ Filtration and ion exchange in one system.
- ▶ DUOBLEND bypass valve puts you in control of the water recipe by tailoring the mineral blend.
- ▶ Effective at removing hardness up to 25 grains.
- ▶ Point-of-use, quick-change system that's easy to install and maintain.
- ▶ Removes carbonate hardness and lowers alkalinity for outstanding scale prevention.



**KEEP YOUR COOL WITH
EXTRAORDINARY ICE**



ICE IS 100% WATER



- ▶ High TDS can cause misshapen, cloudy, soft and quick-melting ice.
- ▶ Chlorine and decaying organic material can give ice an unpleasant taste and odor.
- ▶ Tannins affect color and clarity.
- ▶ High iron levels can promote slime buildup inside machine, parts and bin.



SCALE AND ICE MACHINE MALFUNCTIONS



- ▶ Chlorine and chlorides corrode metal equipment.
- ▶ Mineral scale on evaporators causes cube machines to freeze up and reduces flake machine performance.
- ▶ Dirt, sediment and scale can cause stuck valves and bridging cubes in cube machines and premature bearing wear in flake machines.
- ▶ Scale on float switches can cause them to stick closed, lengthening the harvest cycle on cube machines.
- ▶ Scale can cause inlet valves to stick, causing excessive water to go to the drain and possibly stopping ice production.



ICE SOLUTIONS



PENTAIR EVERPURE 7FC



PENTAIR EVERPURE INSURICE®



Low

High

Flakers: <1500 lb.
Cubers: <650 lb.

2500 lb.
1200 lb.

>5000 lb.
>2400 lb.

ICE PRODUCTION (POUNDS PER DAY)



ICE SOLUTIONS



PENTAIR EVERPURE 7FC

Low-maintenance systems with excellent scale inhibition for high production ice machines.

PENTAIR EVERPURE INSURICE®

Ensure high quality ice while protecting expensive equipment; Micro-Pure II filtration media inhibits bacteria growth that can decrease filter lifespan.

PENTAIR EVERPURE OXIDICE

Ozone technology reduces the need for frequent ice machine cleaning by disinfecting the air, water and surfaces within the machine.



STEAM APPLICATIONS THAT DON'T RUN OUT OF STEAM



PROTECT YOUR EQUIPMENT WITH PURER STEAM

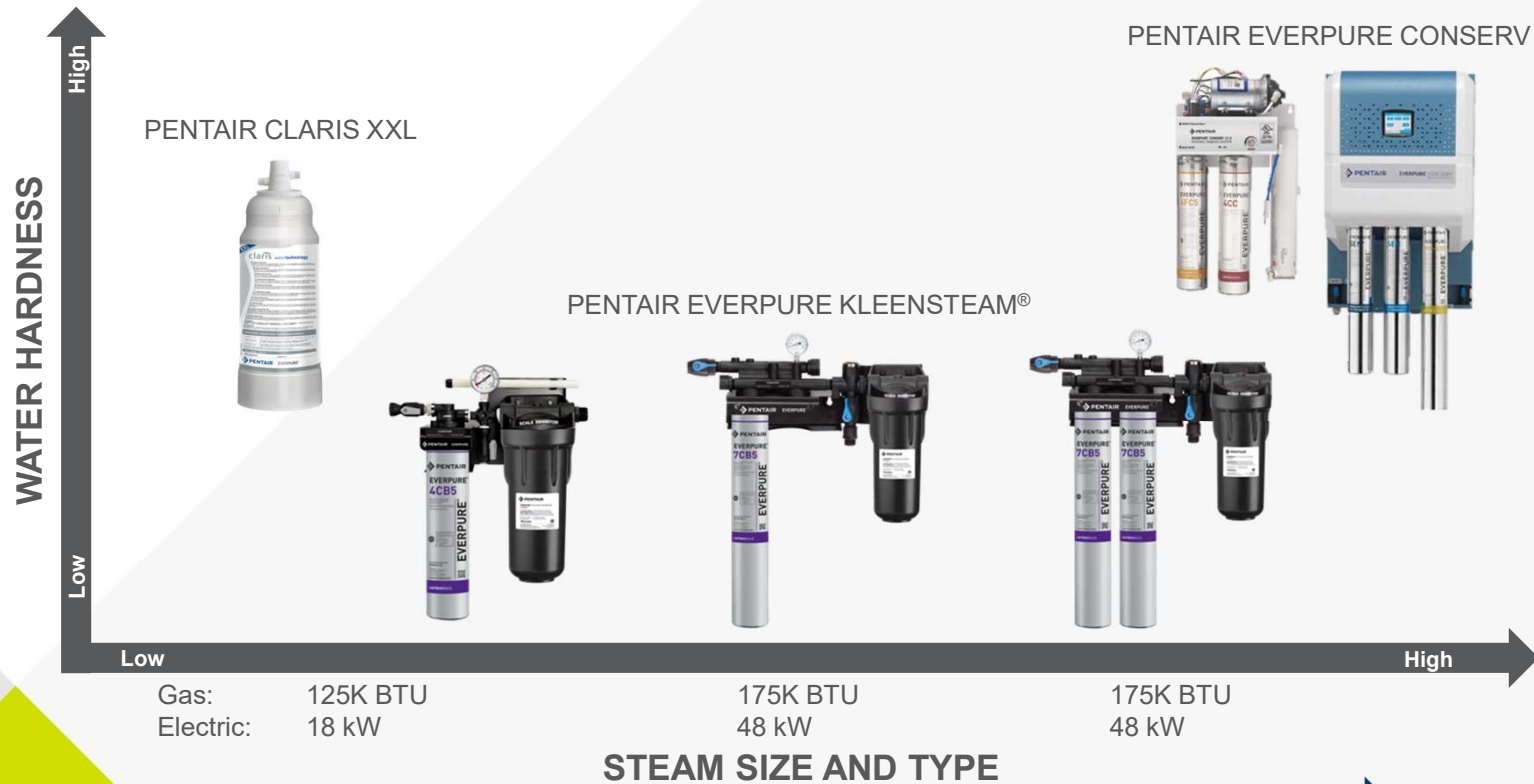


- ▶ Scale increases the energy needed to heat, adding to cooking times and utility costs.
- ▶ Poor-quality water can void manufacturer warranties, significantly increasing equipment replacement costs.
- ▶ Chlorine and chlorides can cause equipment to corrode; scale can cause false readings, stress fractures and leaks.
- ▶ Deliming equipment is expensive and labor intensive.
- ▶ Stuck floats and valves can cause dry firing that can damage controls and elements.

1/8" of scale buildup **increases** steam equipment energy costs by **15%**; **1/4"** increases it by **38%.***

* Scale Deposits and Efficiency Loss Johnston Boiler, 2020

STEAM APPLICATION SOLUTIONS





STEAM APPLICATION SOLUTIONS



PENTAIR CLARIS

Combined filtration and ion exchange that removes carbonate hardness and lowers alkalinity for outstanding scale prevention.

PENTAIR EVERPURE KLEENSTEAM

Provides excellent scale inhibition in high-temperature steam applications; Everpure's ScaleKleen® delimes boilers without hazardous chemicals or special piping.

PENTAIR EVERPURE CONSERV

The best technology to reduce TDS and reduce scale-forming minerals.



**SOFT WATER THAT
WORKS HARDER**



HARD WATER IS HARD ON TABLEWARE



Softened water helps improve tableware appearance and improves warewashing equipment longevity.

- ▶ Hard water leaves spots on glassware and flatware.
- ▶ TDS particles can etch glassware over time.
- ▶ As little as 1/8 of an inch of scale buildup on heating elements can increase energy costs by hundreds of dollars annually.*
- ▶ Chlorine and chlorides corrode metal.

* Scale Deposits and Efficiency Loss Johnston Boiler, 2020

SOFTENED WATER SOLUTIONS



- ▶ Hydroblend™ inhibits limescale buildup and mineral deposits.
- ▶ Provides corrosion protection.
- ▶ High-temperature housing allows for hot water feed installations.
- ▶ Specially designed flow-through head assures consistent, predictable feed rates.



PENTAIR KLEENWARE® HTS-11



SOFTENED WATER SOLUTIONS



PENTAIR EVERPURE SOFTENING SYSTEMS



WS SERIES



CES-9000 SERIES



ELECTRONIC SYSTEMS

COMBINATION SYSTEMS THAT WORK AS HARD AS YOU DO



SAVE SPACE BY CONSOLIDATING FILTRATION INTO ONE SYSTEM



Pentair Everpure high-flow CSR filtration systems provide dual water outputs for different applications:

- ▶ Filtered water for fountain beverages and drinking.
- ▶ Filtered water and scale control for coffee, ice and steam applications.



COMBINATION SOLUTIONS



PENTAIR EVERPURE MC²

High-flow system that reduces chemicals that can affect the taste and odor of beverages and inhibits scale damaging scale buildup.

PENTAIR EVERPURE 7FC

A balance of chemical and mechanical filtration designed for high-volume operations.

PENTAIR EVERPURE 7CLM⁺

Reduces chloramines and prevents scale buildup in brewers, ice machines and steam ovens.

PENTAIR EVERPURE ENDURANCE HIGH FLOW

High-flow system for high-volume foodservice establishments that have extreme particulates in the water supply.

THANK YOU

YOUR SINGLE-SOURCE SUPPLIER FOR FOODSERVICE
FILTRATION, RO AND WATER SOFTENING SOLUTIONS.

[PENTAIR.COM](https://www.pentair.com)





PENTAIR EVERPURE MC²



- ▶ Improves taste and odor.
- ▶ Protects against disease-causing cysts.
- ▶ Precoat submicron technology reduces dirt and particles as small as ½ micron in size.
- ▶ NSF Standards 42 and 53 certified.
- ▶ Available from single to quad systems.



PENTAIR EVERPURE 4FC-L



- ▶ Improves taste even at full flow.
- ▶ Features Everpure Fibredyne technology.
- ▶ Reduces lead and disease-causing *Cryptosporidium* and *Giardia* cysts.
- ▶ Provides bacteriostatic control and reduces microbial growth.



PENTAIR EVERPURE MICROGUARD



- ▶ Reduces 99.9999% of bacteria, asbestos and disease-causing cysts.
- ▶ Delivers premium quality drinking water for main-fed coolers and drinking fountains.
- ▶ Multi-state filter provides membrane and carbon filtration down to 0.15 microns.
- ▶ Delivers excellent taste, odor and chlorine reduction.



PENTAIR EVERPURE 7FC



- ▶ Designed for high-volume operations.
- ▶ Will fit all existing QC heads, making it easy to change from chlorine to chloramine reduction.
- ▶ Available in systems from single to 4 cartridges, with capacities up to 100,000 gallons.
- ▶ Balance of chemical and mechanical filtration, so cartridges are more likely to last to stated capacity.
- ▶ Easy to install and low-maintenance.
- ▶ Features cutting-edge Fibredyne II technology.
- ▶ NSF Standards 42 and 53 certified for bacteria.





PENTAIR EVERPURE COLDRINK



- ▶ For single to 4 cartridge systems, with capacities up to 36,000 gallons.
- ▶ Micro-Pure II filtration media inhibits bacteria growth that can decrease filter lifespan.
- ▶ Precoat submicron technology reduces dirt and particles as small as $\frac{1}{2}$ micron in size.
- ▶ Removes chlorine to improve water taste and odor.
- ▶ NSF Standards 42 and 53 certified.

Slide 48

FT8

Coldrink as to have a pre-filter on it. The quad in the pic is a plain QC7I Quad with MC2's
Fischer, Tony, 2020-11-17



PENTAIR EVERPURE 7CLM⁺



- ▶ Quick-change system with superior chloramine reduction.
- ▶ Fits existing QC heads, making it easy to change from chlorine to chloramine reduction.
- ▶ Available in systems from single to 4 cartridges.
- ▶ Approved by major soft drink manufacturers.
- ▶ NSF Standard 42 certified.



PENTAIR EVERPURE MH²



- ▶ Easy to install and low-maintenance.
- ▶ Unique precoat technology provides superior ½ micron filtration and scale control.
- ▶ Precoat provides excellent taste and odor protection.
- ▶ Full range of products, from 1,500- to 18,000-gallon capacity.
- ▶ NSF Standards 42 and 53 certified.



PENTAIR CLARIS



- ▶ Filtration and ion exchange in one system.
- ▶ DUOBLEND bypass valve puts you in control of the water recipe by tailoring the mineral blend.
- ▶ Effective at removing hardness up to 25 grains.
- ▶ Point-of-use, quick-change system that's easy to install and maintain.
- ▶ Removes carbonate hardness and lowers alkalinity for outstanding scale prevention.



PENTAIR EVERPURE CONSERV



- ▶ High-efficiency RO systems that produce the ideal brewing and steaming water with minimal water waste.
- ▶ The best technology for removing TDS from water.
- ▶ Effective at removing hardness up to 40 grains.
- ▶ Blending allows for customization of the mineral blend.
- ▶ HE-3 system features prefiltration, filtration and RO all in one system.
- ▶ NSF Standard 58 certified.



PENTAIR EVERPURE ESO⁷



- ▶ Three-in-one system for filtration, scale prevention and buffering.
- ▶ Low-cost, quick-change filtration option for espresso.
- ▶ Ion exchange for excellent scale prevention.
- ▶ Retains enough mineral to bring out the espresso flavors.
- ▶ Easy to install and low-maintenance.



PENTAIR INSURICE



- ▶ Ensure high quality ice while protecting expensive equipment.
- ▶ Features precoat technology plus Micro-Pure II media with antimicrobial protection.
- ▶ Single to quad systems, with capacities from 9,000 to 48,000 gallons.
- ▶ Easy to install with minimal maintenance required.



PENTAIR OXIDICE



- ▶ Ozone treatment for ice machine incoming water supply.
- ▶ Supports the reduction of growth of bacteria, molds, yeast and other contaminants.
- ▶ Works by disinfecting the air, water and surfaces within the machine.
- ▶ Extends the time between maintenance and cleaning.





PENTAIR EVERPURE KLEENSTEAM



- ▶ Superior 5-micron carbon block filtration and scale control.
- ▶ Hydroblend provides excellent scale inhibition for high-temperature steam applications.
- ▶ Easy deliming with Everpure's ScaleKleen, which feeds directly into the boiler without hazardous chemicals or special piping.



PENTAIR EVERPURE MC²



- ▶ Innovative precoat filtration technology.
- ▶ Filters water down to ½ micron and reduces chemicals that can affect the taste and odor of beverages.
- ▶ Scale inhibition to protect brewers, ice machines and steam ovens from damaging scale.
- ▶ NSF Standards 42 and 53 certified for bacteria.