

SCOTTCART AQUA Water Filtration System



The <u>SCOTTCART AQUA</u> cartridge filtration system is a simple yet effective way to ensure taint, particle, and microbe free water for many applications in the production facility.

Why Filter Water?

The organisms that live in water are *generally* not beverage-spoilage organisms as most are killed in the presence of at least 1% alcohol. However, water is a fantastic solvent, and it can contain many other notable impurities including:

- Minerals leading to hard water and buildup (Ca, Mg)
- Heavy metal ions that cause off-flavors, buildup, and corrosion or are not safe for human consumption in high quantities (Fe, Mn, Al)
- Taint precursors (CI, FI, Br)
- Other organic solids that contribute to turbidity (Silica)

When is Filtered Water Important?

When cleaning and sanitizing equipment/any surface area that comes into contact with your product. Water impurities can cause scale on equipment, which can be hiding places for biofilms. Water impurities may also interfere with the efficacy of your cleaners.

When preparing depth and bottling filters as organic solids and minerals will prematurely foul filter media (including crossflows).

When preparing additions like yeast, nutrients, bentonite or anything that will be added to the beverage to avoid adding taint precursors. Some water impurities may lower the efficacy of some products: e.g., sodium bentonites will not swell in hard water.

When water is the main ingredient in your formulation such as beer, hard seltzer, kombucha, mead, etc. All the above mentioned problems will be exacerbated.

Ideal Winery Water Parameters

PARAMETER	CONCENTRATION	
Fe, Mn	< 0.1 ppm	
Al	< 0.5 ppm	
Silica	< 10 ppm	
Chlorine	Not detectable	
Hardness	< 60 ppm CaCO ₃	
Sum: Ca + Mg	< 70 ppm	
Turbidity	<1NTU	

Test Your Water Quality

We've partnered with Ward Labs to offer custom winery water panels.
This panel includes all the parameters listed to the left.

A water test kit includes the cost of the analysis, a sample bottle, box, and prepaid label with 2-day shipping through FedEx. You can also choose to package and mail your own sample. Scan the code to learn more.









Why SCOTTCART AQUA?

SCOTTCART AQUA is a **customizable multi-stage cartridge filtration system**. You can **choose from three housing sizes** to create a system suited to your flow rate needs. You can **choose from three media types** to create a system appropriate for treating your water quality. **Please reach out to our filtration experts to create the right setup for your needs.**

SCOTTCART AQUA Housings

Housings come in 10, 20 and 30 inch sizes. We can help you size your housings based on your flow rate (how many gallons must be filtered per hour).







SCOTTCART AQUA Media

We can help you choose the best combination of filter media based on your water quality. Filter media is available in:

- Clarify: an embedded carbon cartridge that removes flavor, color, and taint precursors.
- Purify: a 1µ polypropylene absolute rated depth cartridge prefilter that will get your water to a solid-free state.
- Finish: a 0.3 µm polypropylene absolute rated depth cartridge that will remove any leftover microorganisms.



CLARIFY

Carbon step to remove toxins, heavy metals, taste, color and taint precursors, chlorine, fluoride, limescale and more.



PURIFY

Polishes the water to a bright solid-free state, removing any visible suspended solids and significantly reducing the larger microorganism population present.



FINISH

Final polish to produce a microorganism-reduced, suspended solid-free finish.



SCOTTCART AQUA Pre-Assembled Kit

Don't need a custom system? Opt for our pre-assembled kit instead. This pre-assembled kit includes three housings and three cartridges:

	STAGE 1	STAGE 2	STAGE 3
Housing Size	30"	20"	20"
Cartridge	Clarify	Purify	Finish
Cartridge Purpose	An embedded carbon cartridge that removes flavor, color, and taint precursors.	A 1µ polypropylene absolute rated depth cartridge prefilter that will get your water to a solid-free state.	A 0.3 µm polypropylene absolute rated depth cartridge that will remove any leftover microorganisms.

This kit can run comfortably at a high-end average of 720 gph depending on the amount and nature of the load that has to be removed. For heavier taint levels, a flow rate of as low as 180 gph is recommended so that sufficient contact time between the carbon and water is maintained. Please note that pressure drops won't always be indicative of carbon performance and that using a flow meter is recommended in these cases.

Technical Specifications

SCOTTCART AQUA Housings

KEY FEATURES

- Single round housings that house double open end (DOE) SCOTTCART AQUA cartridges
- Quick release vee clamp closure for easy opening
- Tie rod assembly design ensures cartridge centering for a reliable knife edge seal
- 316L stainless steel construction
- Available in 10" 20" and 30" sizes
- Rated to 10 bar liquid and gas pressure
- Ships assembled with pressure gauge and valves
- 1" NPT threaded connection

MAXIMUM OPERATING CONDITIONS

Pressure range: Liquid & gas pressure up to 10 bar (145 nsi)

Temperature range: -10°C/150°C (14°F/302°F)

Materials of construction:

Body and closure: 316L Stainless Steel Clamp: 304 Stainless Steel Finish: Externally polished sump, bead blast investment cast head

Dimensions:

See drawings and sizing in documents in product page

SCOTTCART AQUA Media

SCOTTCART AQUA cartridges are double open-ended cartridges offered in 10", 20", and 30" sizes for each media type. Please see the SCOTTCART AQUA cartridge refill product pages (Clarify, Purify, Finish) for technical data sheets and validation guides. Scan the code to the right to learn more.

