



WINE FILTER MEDIA

LENTICULAR FILTER MODULES



SEITZ-SUPRADISC II

0.2 μ  55 μ

The SUPRADisc II design combines the filtration performance of Seitz media and the structural robustness of interlocking dual drainage plates. This is the most robust design available in the market today. The dual drainage plate design optimizes flow distribution by providing unobstructed process flow. These advancements in module design enhance the integrity as well as provide superior resistance to back pressure failures of the filter media, giving the SUPRADisc II the unique ability to be backflushed.

FILTER MODULE BACKFLUSH PROCEDURE

The backflush is a mechanical means used to clean and regenerate filters in order to improve operational economics and minimize production downtime. This type of cleaning cycle is most effective for the removal of hard, non-deformable contaminants that cake well on the filter surface. Our recommendation is to set the “plugged” (initiate cleaning) differential pressure at half the recommended final change out differential pressure. These cleaning cycles have significant practical and economic value. Experience has shown as much as a five fold increase in filter life.

- To initiate a regeneration, drain or push residual product out of filtration vessel. Backflush the modules for 5-10 minutes with ambient water or until discharge water is clear and free of solids.
- Now forward flush with ambient water at 2-3 times the product filtration flow rate.
- Gradually increase temperature to 140°F (60°C). Continue at high flow rate (or reduced flow rate if hot water is limited), for 5 minutes.
- Maintain this temperature for 5 minutes by switching off the pump and letting the modules soak. Gradually reduce temperature back to ambient water and resume high speed flow.
- When complete, filtration can resume after draining or pushing water.

Note: The regeneration procedure is best done before you reach a differential pressure of 17 psi. If you wait until you reach 20 psi to do a regeneration, the subsequent backflush and forward flow won't decrease the differential pressure and the module would be clogged permanently.



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SEITZ PRE-CART PPII

Maximum production efficiency

During the production of wine, it is an economical essential to protect expensive final membrane filters against premature blockage. Due to their high particle loading capacity, this type of filter cartridge is particularly suited for the filtration of wine with residual solids load.

FINAL FILTER CARTRIDGES (MEMBRANES)

Available retention rates: 0.45 μ and 0.65 μ



SEITZ MEMBRA-CART XLII

Maximum security

This membrane filter cartridge for microbiologically reliable filtration offers maximum security due to the tested organism retention and documentable integrity testing. Titer reductions of 10^9 for bacteria (at 0.45 μ) and 10^{10} of yeast (at 0.65 μ) are typical and represent the highest level of secure wine filtration.

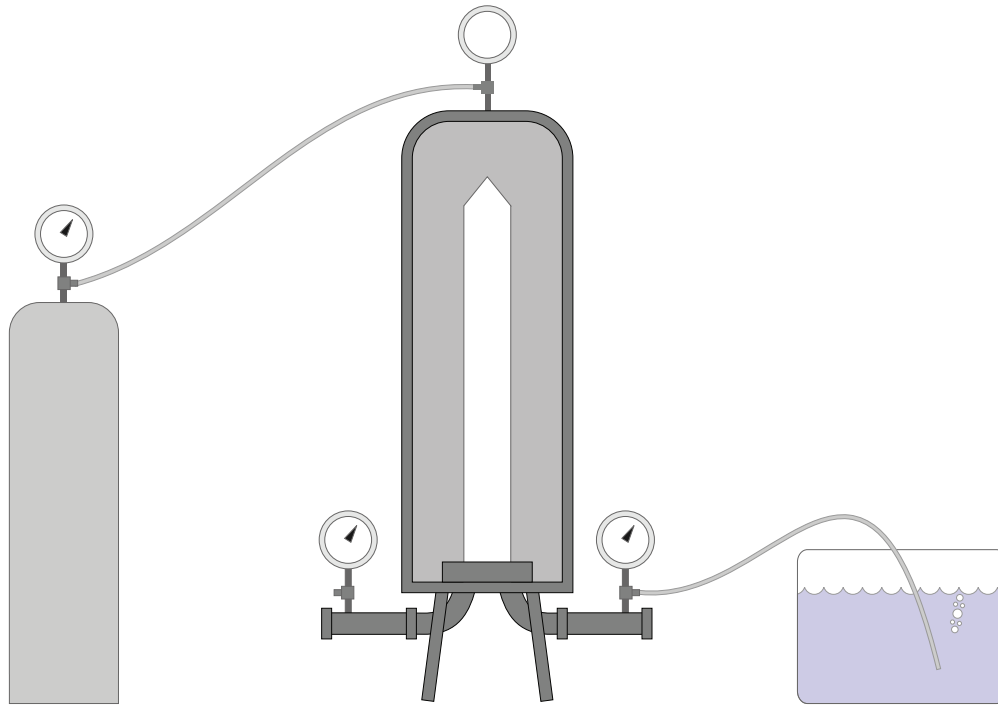
FILTER CARTRIDGE CLEANING PROTOCOL

- Forward flow with cold water up to 68°F at flow rates up to 8 gallons per minute per 10" of membrane cartridge length. **DO NOT ALLOW BACKWARD FLOW THROUGH MEMBRANE CARTRIDGES.**
- Forward flow with hot water up to 180°F at flow rates up to 4 gallons per minute per 10" of membrane cartridge length. **DO NOT ALLOW BACKWARD FLOW THROUGH MEMBRANE CARTRIDGES.**
- Soak overnight in a 2% by weight caustic solution (2% by weight, caustic mixed with water at a temperature up to 145°F). **CAUTION: This solution is highly corrosive and can cause severe eye injury. Required safety equipment: rubber gloves, rubber apron and full face shield.**
- After soaking, remove membrane cartridges and hose down with tap water.
- Soak in a high acid solution with pH below 2.0 for at least one hour. Be certain to take proper safety precautions.
- Remove cartridges and hose down with tap water. Install cartridges in the housing.
 - Seitz PREcart PPII are cleaned in the same manner as the membrane cartridges. In addition, you can backwash (reverse flow) the Seitz PREcart PPII to remove inorganic material.
 - After cleaning, acidified SO_2 solutions can be used for short-term storage, though O-rings must be removed during storage in SO_2 . Solutions of alcohol (40%) such as vodka can also be used for short or long-term storage.



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BUBBLE POINT INTEGRITY TEST



TEST METHOD

- Sanitize filter.
- Drain housing.
- Connect the upstream port of the filter to compressed air (always use a regulator).
- Connect flexible hose from the downstream port of the filter into a bucket of water.
- Gradually increase the pressure from zero, using the pressure regulator.
- Observe the bucket of water for vigorous bubbling.
- The bubble point is reached when bubbled are produced from the hose at a **steady rate**.

BUBBLE POINTS FOR TYPICAL WINE FILTER (AIR AS THE TEST GAS):

Filter Grade	Wetting Fluid	Minimum Bubble Point
XL II 0.45 μ Membrane	Water	26.1 psig
XL II 0.65 μ Membrane	Water	19 psig

- If the bubble point is greater or equal to the minimum bubble point listed above, the filter is integral.

TEST CONSIDERATIONS

- Failure to wet the filter completely may result in a false failure.
- Some air will diffuse at lower pressure to form bubbles. This will not result in vigorous bubbling and is NOT the bubble point.
- If failure occurs, open the filter housing to ensure that the filter is installed correctly in the housing. Replace and retest. Dispose after two failures.



The first effective depth filter media microfilter was developed and produced by Seitz in 1914. Seitz continues to be a world leader in new technologies as well as the most popular filter pad in North America.

Due to the material composition and structural design, SeitzSchenk depth filter sheets can basically be compared with a maze-like, extremely fine, three-dimensional matrix with numerous branched microchannels. This forms a structure with a void volume amounting to as much as four liters per square meter of filter area. The greater the void space, the greater the holding capacity of the pad and therefore the serviceable life.

Filter pads are one of the most popular options for winemakers, brewers and distillers to filter their products. Pads are easy to use and offer repeatable and reliable filtration with the capacity to sterilize filter products in preparation for bottling or during cellar operations. Filter pads are available from Scott Laboratories in various grades and dimensions. Most modern sheet filter units accommodate 20x20 cm, 40x40 cm or 60x60 cm pads. Scott Laboratories stocks significant inventory of all these sizes in grades ranging from 0.2 μ - 55 μ sizes.

FILTER SHEET CLEANING PROTOCOL

Rinsing and Sterilization:

Unsterilized sheets should be rinsed with water or recirculated with product for a minimum of 10 minutes prior to use.

- Hot water sterilization: 20 minutes at a minimum 180°F.
 - Steam sterilization: (stainless steel plates ONLY): 20 minutes at a maximum pressure of 7 psi and a max temperature of 230°F. Do not expose filter plates to heat in fully tightened conditions. Retighten filter after cooling.
 - Suggested compatible sanitizers:
 - Sulfur dioxide at 1000 ppm
 - 5% citric acid solution
 - Phosphoric acid solution (0.1-0.2%, pH 2.0)
- *Avoid ozone or chlorinated chemicals.**

	20x20 cm		40x40 cm		60x60 cm	
	Sterilizing	Polishing	Sterilizing	Polishing	Sterilizing	Polishing
Optimum gal/hr/sheet	5	9	20	35	46	75
Max. gal/hr/sheet	6	13	25	50	50	100
Max. Differential Pressure	21 psi (1.5 bar)	45 psi (3.0 bar)	21 psi (1.5 bar)	45 psi (3.0 bar)	21 psi (1.5 bar)	45 psi (3.0 bar)



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