

## Filtering Procedure 2010

1. Rack from tank to tank after fermentation, allowing the juice to clear, THEN rack into barrels. Rack barrels at least once during barrel aging before filtering. Taste all barrels before filtering to make certain all contain good wine and/or determine the blend to be used. The day before filtering, rack from barrels to tank. This mixes flavors from each barrel and provides uniform consistency. Allow to settle overnight and then filter.
2. Bentonite white wines 2-3 week before filtration to prevent tartarate formation
3. Send out to test for ML fermentation completion, residual sugar, VA or Brettanomyces.
4. For wine that contains lots of sediment and or needs filtration:
  - a. Set up 2 micron paper pads over plastic plates of filter, at least 10 plates with pads are required to tighten the filter properly. Place rough side of paper pad towards the plastic plate closest to the valves. Then alternate the rough/smooth side of the paper pads on plastic plates. Check to make certain that the paper pads cover the plastic plates to prevent leaks. 2 microns are large enough to allow wine to pass through without facing off rapidly. If the wine has been racked enough times, the pad should last through most of the wines to be filtered.
  - b. Make certain the rubber rings on the plastic plates seal well. Use rubber mallet to help align plates and rings.
  - c. Tighten filter to prevent leaks.
  - d. Rinse paper pads with water to soak the paper pads.
  - e. Tighten again.
5. Sterilize hoses
  - a. Run solution of  $\frac{1}{4}$  Cup KMS with  $\frac{3}{4}$  Cup Citric acid/20 gal water through hoses for 5 minutes.
  - b. No need to rinse hoses in water unless water is sterile.
6. Filter
  - a. Attach hoses to already set up filter and pump. While facing filter and gauges, the intake is on the upper left and output on the lower right.
  - b. Place intake hose into bucket with Citric Acid wash (2 cups/20 gallons water).
  - c. Turn on pump and pass Citric Acid wash through filter until all 20 gallons of wash are used up. Use 20 gal buckets.
  - d. Place intake hose into bucket of water and continue to wash until both the Citric Acid and paper tastes are removed. This is a critical step because we don't want a cardboard taste in the wine. It may take 15-20 minutes.
  - e. Place a hose from pad filter into a 1 micron cartridge filter (if using). It filters top to bottom, outside to inside. Add an output hose to the output of the cartridge filter, pushing through water (if sterile) or wine for a few minutes to clean KMS storage solution out of the cartridge.
  - f. Place intake hose into the wine.
  - g. Open all valves and keep open until wine comes out the drain of pad filter (bottom left). Close this drain.
  - h. Keep sight glasses full by adjusting valves next to glasses and exit valve (bottom right).
  - i. Taste wine coming out of right sight glass valve until the flavor is full and color good (filters can strip the wine of color and flavors but this will eventually return if allowed to pass wine through the filter for a sufficient length of time).

- j. Continue to watch sight glasses and keep them full by bleeding any air that enters by opening their valves.
  - k. Continue to filter until the pressure reaches 28 psi or you finish filtering your wine (the lower the psi the better). Change pads once the pressure reaches 28 psi.
7. If wine does not have sediment, omit using the 2 micron paper pads and begin with 1 microns. (Although we have always started with 2 microns)
8. Clean up
  - a. Remove and discard used paper pads.
  - b. Wash plastic plates thoroughly as well as all openings and rings.
  - c. Force water into sight glasses to remove residual wine.
9. Check each individual filtered wines for SO<sub>2</sub> levels and adjust if necessary.
10. Count the number of pads required for next time and order when necessary.
11. All wines must be sterile filtered during the beginning of the bottling line with 0.5 micron cartridge pre-filter and a 0.45 micron sterile cartridge filter that haven't the following characteristics.
  - a. Completed ML fermentation
  - b. No residual sugar
  - c. No VA bacteria or evidence of Brettanomyces
12. If filtering the next day, sanitize the hoses with KMS. You can leave the KMS in the hoses overnight and rinse the next day. Replace the pads on the pad filter and repeat from #3.