#### Chapter 7: Maintenance



Inspect all equipment and ensure proper operation before use.

Most equipment that is used on a regular basis only needs a simple inspection.

Always stock spare parts for equipment most prone to breakage or loss: airlocks, bungs, membranes and pumps for floating-lid tanks, hydrometer, thermometer.



Equipment	Schedule
Glass Carboys	Clean, sterilize and rinse thoroughly after each use. Inspect the vessel during the cleaning process to detect any excess wear or damage that would warrant replacement. Allow each vessel to sit overnight full of a sterilizing/enzyme solution to reduce or eliminate any staining or tannin buildup and enhance visibility. Rinse well and re-sterilize before next use.
Plastic carboys and primaries	Clean, sterilize and rinse thoroughly after each use. Visually inspect the vessel during the cleaning process to detect any excess wear or damage that would warrant replacement. Allow each vessel to sit overnight full of a sterilizing/bleaching solution on a monthly rotation in order to reduce or eliminate any staining that may have occurred. Rinse well and re-sterilize before next use.
Bottle Sulphiters	Replenish sulphite solution as needed. Empty, wash and air-dry daily. Replace cracked or discoloured parts to maintain visual appeal.
Bottle Drainers	Clean as needed during daily operations. Wash and sterilize with at end of each day. Detailed cleaning (soaking in sterilizer) should occur monthly.



Equipment	Schedule
Filtering Machines	Clean filter after every use. Plates and hoses should be soaked daily in a sterilizing solution, rinsed and air- dried prior to storage. Follow manufacturers recommended procedures when cleaning the filter pump and frame. General cleaning of the unit should occur as needed with a detailed cleaning monthly.
Enolmatic Bottle Filler	Clean or rotate pressure vessel and rinse hoses after each bottler. Cover bottling machine during periods of inactivity to avoid contamination. Wash, sterilize, rinse and air-dry pressure vessels and hoses at the end of the day. Do a general tear-down, cleaning and maintenance following manufacturer's suggestions on a monthly basis.
Pneumatic Corker	Wipe down between bottlers eliminating any spatter or spillage that may occur. Spray with sulphite mist if deemed necessary. Inspect and thoroughly clean monthly following manufacturers suggested procedures. Replace silicone sleeve as necessary and monitor the plexi-glass door/shield as to working condition for safety reasons.



Equipment	Schedule
Manual Corker	Wipe down between bottlers to eliminating any spatter or spillage that may occur. Try to avoid product being pushed into the jaws of the corker due to overfilling of the bottles since this is a high risk area for contamination. The fact that the cork sits in this area prior to insertion you want to ensure that there is little or no contamination existing in this area. In the case that wine has become present amidst the corker jaws, it would be recommended to carefully disassemble the corker and dry the mechanism thoroughly at the end of the bottling session.
Shrink Capsule Machine	The outer surface of the shrink machine should be wiped down occasionally to ensure cleanliness and visual appeal. Other than that, any other maintenance should be done in accordance with the guidelines of the manufacturer.
Automatic Bottle Washers	Maintain on a daily basis. Perform a general cleaning following manufacturers guidelines once a month.
Trolleys and Carts	Maintain general cleanliness and appearance on a daily basis with a good thorough cleaning and sanitizing once a month.



Equipment	Schedule
Airlocks and Rubber Stoppers	Wash, sterilize, rinse and air-dry after use. Store in a clean sterile container.
General Utensils (brushes, spoons, etc.)	Wash and sterilize as needed. Replace as wear demands.
Countertop areas (stainless and other)	Wipe down as needed during the work day using a clean cloth as well as giving the area a thorough cleaning at day's end. Avoid leaving un-rinsed cleaning clothes in the work area.
Racking and shelves	Wipe any spillage or overflow as soon as it occurs. Attempt to keep the storage area as free as possible from potential contamination. Do an overall wipe-down of the racking and shelves on a monthly basis.
Floors	Clean any spillage as soon as possible while alerting customers as to potential slipping areas via warning cones or signs. Do a general cleaning in the bottling and production areas daily and a thorough cleaning once a month using a good commercial product. Ensure both mops and buckets are properly cleaned prior to storage to avoid possible mold sources. Do a visual inspection during the cleaning process to detect any damaged areas that could harbor contamination.



Equipment	Schedule
Oak barrels (empty)	Every 2– 3 months, burn sulphur strip
Oak barrels (wine)	Once a month, top up with wine
AC unit	Test yearly, prior to startup
Heating unit	Test yearly, prior to startup
Filters on HVAC units	Rinse with fresh water every 6 months; replace as per manufacturer's schedule
CO <sup>2</sup> detector	Test yearly
Water filter	Replace cartridge as per manufacturer's schedule

