

APOLLO 30L SNUB NOSE FERMENTERS



Instruction Manual

The Apollo 30L Fermenters are our newest Unitank and Close Bottom Snub Nose variety P.E.T. Pressure Fermenters. Made

in Australia and individually pressure tested, these tanks offer more convenient single batch capacity and boast a larger tank opening for ergonomic handling and cleaning. The Unitank variety utilise our new centralized plunger valve offering more sanitary yeast harvesting and more accurate temperature control due to the centralized thermowell. The floating dip tube design can now be attached to the thermowell/plunger valve, allowing for cleaner and clearer beer transfer from the centre of the tank.

Compared to Butterfly Dump Valves, the plunger valve option on the unitank versions is easier to disassemble and clean. It is an overall more sanitary dump valve, and we believe that it will help brewers brew even better beer than before since sanitation is key to brewing great beer in the first place. Much like a bung or sink plug, the Plunger Valve closes off the bottom of the fermenter by being pushed in from the top. The seal is airtight, ensuring nothing enters or leaves the bottom hole of the tank. Pulling the Plunger Valve up opens the bottom of the tank, allowing yeast slurry and vegetal matter to fall through. It's that easy. We recommend fermenting with the valve open to start.

Made from BPA-free, bottle-grade PET plastic, the unitank itself is pressure-rated at 5 bar, making it the safest vessel of its size for pressure fermentation. Fermenting under pressure has its benefits, including low ester formation, less dependence on temperature control, oxygen-free transfer and beer that is near-carbonated after fermentation. For homebrewers and small batch brewers, pressure fermentation allows for faster fermentation times.

Safety Protocols

Your Apollo is made of bottle-grade PET plastic that is highly crystalline and pressurisable. The following protocols must be addressed to ensure your own safety when handling the tank under pressure.

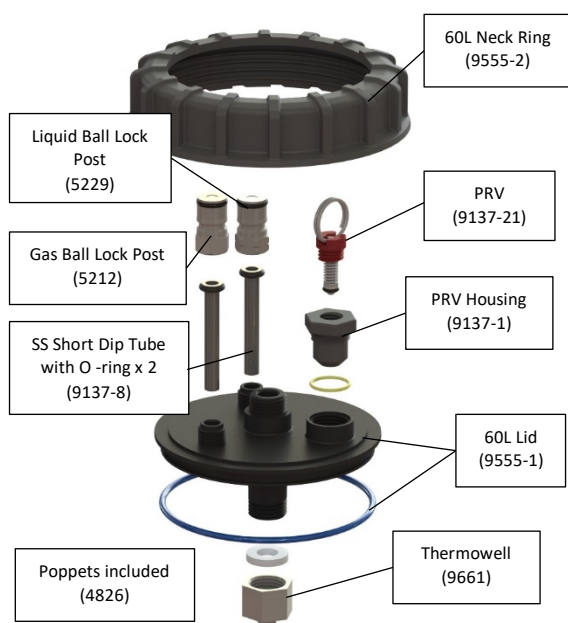
- Do not expose the tank to temperatures above 50°C (122°F) or below -2°C (28.5°F).
- Do not apply more than 2.4 bar (35 psi) to the tank under any circumstance.
- Never connect to an unregulated pressure source.
- If you connect to an external pressure source; ensure it has an independent pressure release valve (PRV).
- Use only the RED PRV supplied by MCH Australia Pty Ltd on the pressure lid.
- Do not use the tank under pressure if it has been physically damaged i.e. dropped on the ground.
- The tank is pressure tested at production and is marked with a date for retesting. Past the marked date, ensure that the tank undergoes a hydrostatic pressure test before further usage under pressure.

Installation guidelines

Out of the box, the Apollo lid has 4 ports available for use:

- 2x ball lock posts
- The PRV/dryhop port
- The Central Plunger Valve port

1. Seat the PRV Housing into the PRV Port within the lid.
2. Seat the PRV into the PRV Housing.
3. Place the SS dip tubes with O-ring through the ball lock post ports in the lid.
4. Place a Universal Poppet into each ball lock post.
5. Tighten down the liquid and gas posts to the threaded ball lock post ports on the lid (it does not matter which side you choose to place the liquid or gas).
6. Slide the top end of the Silicone Dip Tube (9555-8) onto the SS dip tube under the Liquid Ball Lock Post.
7. Screw the thermowell rod onto the bottom thread of the lid.
8. Screw on the neck ring to firmly hold down the lid.



Operation Guidelines

Leak Test

It is important to check for leaks to ensure that all of the parts are securely in place so that no beer is lost and the vessel can operate safely during fermentation. To do this:

1. Pressurise the tank to no higher than 20 psi.
2. Disconnect the gas line and check for leaks using a spray bottle filled with foaming sanitiser or soapy water around the seals and joints.
3. To fix a leak, DEPRESSURISE the tank first before readjusting the fittings.

Cleaning and Sanitation

1. For cleaning, we recommend non-caustic products such as sodium percarbonate or our Atomic 15 ABC (Alkaline Brewery Cleaner product code 9006) to make cleaning easier, we recommend our Gen 3 CIP Cleaning Kit that attaches to the inside of your Apollo!
2. To sanitise your Apollo, it is best to go with non-rinse phosphoric acid type sanitisers such as Atomic 15 Foaming Sanitiser (product code 9001) or anything similar.
3. Do not use caustic soda or strong acids as they will deteriorate the plastic material.
4. Do not exceed temperatures above 30°C. PET is a soft plastic and will deform at higher temperatures.
5. For scrubbing protein residuals, soft sponges are highly recommended. Do not use steel wools.

Fermentation

Wort should be chilled to below 30°C prior to transfer to Apollo tank. After pitching in the yeast, close up the tank and ferment with controlled temperature and pressure. To control Apollo's internal pressure, we recommend attaching the Keg King spunding valve (9161) to an MFL gas ball lock disconnect (8282 for plastic, 7797 for stainless steel) and affixing the spunding valve set up to the gas ball lock post on the Apollo lid.

Temperature can be monitored through the thermowell built into the Plunge Valve. Simply insert a temperature control device probe 6mm or under into the thermowell to gauge liquid temperature readings at any height within the fermenting beverage.

During and after fermentation, hops can be added to the fermenter by de-pressurising and utilising the dryhop port for pellet hops. Once added, the tank can be purged and re-pressured with a regulated CO₂ source.

Sampling from the fermenter can be easily done with the liquid to liquid transfer line (9183). Simply connect one end to the liquid post and move the liquid out by pushing down on the internal pin of the opposite disconnect. No additional CO₂ is required as the fermenter is already pressurised.

When fermentation is complete, bring the temperature of the beverage down to cold crash the yeast and increase beverage clarity. You can remove the spunding valve and attach a gas line to hold your desired carbonation pressure when the liquid is cold.

If the internal gas pressure of the tank after fermentation was not enough to carbonate your beverage entirely after cold crashing, attach a regulated CO₂ source to the gas post to allow the beverage to finish carbonating to your desired carbonation level.

Storage

After each fermentation, it is a best practice to clean and sanitise fermenter, then store dry. We recommend pressurising the tank to 10 psi and storing in a cool room away from sunlight. This ensures that your tank stays free from oxygen and bacteria for up to 2 weeks.

Gen 3 Cooling Coils

Inserting the Cooling Coil Kit is optional and for this reason, the ports for the Cooling Coil will need to be manually drilled into the lid. To insert the cooling coils:

1. Drill two 13mm diameter holes through the indentations marked on the lid.
2. Protrude the Cooling Coil Posts from the bottom of the lid so that the male threads are facing upward with the O-rings on the underside.
3. Secure each post by screwing the Cooling Coil Nut onto the male thread.
4. The Cooling Coil connects to the lid by pushing the ends through the Cooling Coil Posts. Adjust the seating level of the Cooling Coil to finish.

IMPORTANT INFORMATION ON PROPER USAGE

Use of this product in a manner other than its intended use as a pressure fermenter or using this product beyond indicated safe working pressures or safe working volumes can result in damage to the product, property and serious injury. Never attach to an unregulated pressure source or fill the unit sealed from a mains or other water source. Rapid shifts in pressure, even while venting pressure through the Pressure Relief Valve (PRV) in the lid, may occur faster than can be relieved through the PRV and may result in catastrophic damage to the unit, property and users. Always ensure adequate pressure relief is attached to the unit and gradual pressure increases are monitored and regulated.