



Basic CIP Setup

With the release of our new Unitank Fermenters featuring a 3" tri-clover lid mounted ferule, alongside our offered 3" CIP Spray Ball, the possibilities for various CIP configurations have enticed us to detail a solution for home brewers. For those not immediately familiar with how CIP works; a spray ball attachment similar to a sprinkler is mounted to the interior of the Chronical's lid and then connected to a high-flow pump that evenly and thoroughly distributes caustics and sanitizers onto the interior surfaces. CIP installations are primarily a commercial brewing mainstay because of the inherent time and labor efficiencies for turning fermenters around in short order.

Warning

CIP spray ball operation requires a relatively high-pressure pump in a vessel, with hot caustic solutions; these factors below should not be ignored for proper safety.

As a result, some pumps can cause an unsafe situation in a sealed vessel due to the inability of liquid to evacuate the fermenter as fast as it is entering. This can happen if the user has not opted to connect to the unit's lower dump valve to their pump's supply feed. Make sure the dump valve is connected and the completed loop is open before the CIP pump operation begins. You can help elevate this issue by not applying the clamps, the weight of the lid should be sufficient if the vessel is not moved.

Keep in mind that while the CIP spray ball setup in this situation will have a ½" barbed connection, an increase in flow capacity is suggested to alleviate and avoid the buildup of pressure within your vessel. This means that users should have at least 1" fittings on their lower valves to divert the flow of liquids back to the pump's supply feed; ensuring that pressure does not damage the lid clamps if utilizing in a sealed tank. Furthermore, it is recommended that users keep both racking, blow off arm, and sample ports open during CIP. Make sure the dump valve and the completed loop is open before the CIP pump operation begins.

These precautions will ensure safe operation while using dangerous chemicals, in addition to avoiding damage to your fermenters.

The parts below are recommended for use in our 1 BBL Fermenters

We recommend that the Micro CIP ball be used in the 7 Gal, 14 Gal, and Half bbl units.

Part List

- (1) Chugger Max with Stainless Head (17gpm or higher)
- (1) 3" TC Spray Ball
- (1) Hose Barb | ½" to ½" FPT (CIP cap inlet)
- (1) Pump Inlet | 1" NPT to 1.5" TC (Pump inlet converter to TC)
- (1) Valve | ½" 3 Piece Ball Valve (Pump Outlet, to control flow)
- (1) Hose Barb | ½" to ½" MPT (Installed in Pump Outlet Valve)
- (2) Hose Barbs | 1" barbed to 1.5" TC (Installed on pump inlet and bottom dump valve)
- 5 ft length ½" Tubing
- 5 ft length 1" Tubing
- Stainless Hose Clamps
- 1.5" TC gaskets and clamps as needed.

Keep in mind that this configuration is merely a suggestion, so by all means modify our solution to fit your own individual needs. We have just supplied a basic way to get the CIP loop accomplished.

Setup

The fundamental basis for the installation is to establish a loop; where PBW or other caustic cleaners can move from the conical cone, to the inlet feed of pump to the CIP spray ball head attached to the lid of the vessel, then return to the cone.

Once you have the recommended parts on hand, begin by installing the 1" NPT to 1.5" TC adapter onto the inlet side of the pump. Then install the 3 piece ball valve and ½" MPT barb on to the outlet side of the pump housing. Use Teflon tape wherever possible to insure a watertight seal.

Next assemble the second Hose Barb | ½" to ½" FPT with Teflon tape on top of the 3" TC Spray Ball

Now it's time to attach the 1" barbed to 1.5" TC adapters to both the bottom dump valve of your tank and inlet of your pump.

- Take the 1" barbed to 1.5" TC adapter with a gasket and clamp and attach it to the bottom dump valve.

- Take the 1" barbed to 1.5" TC adapter with a gasket and clamp and attach it to the pump inlet (make sure you have installed the 1" NPT to 1.5" adapter as stated above)

Lastly, place the Chugger Max pump near the fermenter. Basically, you are now going to run 1" tubing from the outlet of the dump valve on the fermenter to the feed inlet of the pump. Make sure you have adequate length and connect both sources with a hose clamp connection. Next run the ½" tubing from the outlet of the pump/valve to the inlet of the 3" TC spray ball with the ½" barb on top. Again, make sure you have enough length and apply hose clamps to both ends. Because of the relatively high pressure, be sure to use hose clamps on all tubing connections.

Your basic CIP system is now ready to run, mix PBW to the recommended strength, and insure that the pump is fully primed and your entire path way or loop is open before making any electrical connections

Make sure you use a GFCI outlet when dealing with water and electricity.

Again please use caution and read through the warnings above. These precautions will ensure safe operation while using dangerous chemicals, in addition to avoiding damage to your fermenters.