

## Kettle Whirlpool Fitting Quick Reference Guide

WARNING – The kettle whirlpool fitting was designed with a 180-degree spray pattern for maximum effectiveness, and should be fully submerged whenever in use to avoid splashing of hot liquids, scalding, or other injury. Furthermore, we recommend that the fitting be mounted and operated within the confines of the bottom 20% of total kettle volume. For example, examining a 15-gallon kettle, the whirlpool fitting should not be mounted higher than the 3-gallon level. This will insure that even when brewing relatively small batches in relation to total kettle volume, the fitting remains fully submerged.

Furthermore, owners of SS Brewing Technologies Kettles may use the thermometer port as a reasonable substitute for operating the whirlpool fitting in lieu of adding another dedicated whirlpool port to their kettle. SS Brewing Technologies' Kettle owners should not under any circumstances attempt to use their kettle's upper recirculation port for whirlpooling.

This quick reference guide is designed to inform users of the best practices for kettle whirlpooling using our whirlpool fitting and associated parts. For those that are not familiar with kettle whirlpooling, this step is performed immediately post-boil. A loop is established between the kettle's ball valve, a pump, and our fitting to quickly circulate hot wort in the kettle. This circular "whirlpool" action aggregates pellet hops and other break-material into a cone in the center of the vessel. This action, along with a trub dam, and fining agents insures that the clearest wort possible finds its way into the fermenter.

## Installation

The fitting is secured to the kettle using ½" MPT threads, and will require a bulkhead for proper use. Users can source a generic bulkhead or utilize our ½" FPT Thermometer Bulkhead to attach the fitting to the kettle's sidewall.

- 1. Using our thermometer bulkhead, thread the whirlpool fitting into the female end of the bulkhead, using Teflon tape for a secure liquid tight connection.
- 2. If you are not utilizing the pre-punched thermometer port on SS BrewTech Kettles, drill a 22 mm hole in the bottom 20% of the kettle's total volume. A 22mm hole saw is available on our website as part of the mash tun retrofit kit. Or users can source a hole saw or stepper bit separately. The whirlpool fitting can be attached to virtually any orientation on the kettle for added convenience.
- 3. Feed the threaded male end of the thermometer bulkhead through the interior of the kettle, making sure that the included red high-heat silicone o-ring is seated into the

- bulkhead's o-ring groove and mates evenly with interior of the kettle's sidewall. Allign the whirlpool fitting and bulkhead so that the spray pattern moves evenly along one side of the kettle's interior sidewall.
- 4. Instead of using the locknut included with the bulkhead, users should utilize a ½" FPT ball valve to restrict flow while the whirlpool fitting is not in use. Make sure that the PTFE (white plastic) o-ring is secured between the kettle's exterior sidewall and the ball valve.
- 5. You may attach a quick disconnect fitting or hose barb to the whirlpool fitting's ball valve to ultimately make the connection to your pump. Please insure that all hose connections are secured with hose clamps.

One installed, your fitting is now ready for use. Insure that you always take the necessary precautions when using a pump with hot liquids.

## **Operation**

Begin by making all necessary hose connections between the kettle's primary ball valve/dip tube and the pump's return feed or "in" connection. Then attach the supply line or "out" connection to the whirlpool fitting's ball valve to complete the loop. We recommend that users adhere to high heat tolerant widely recognized standard brewing pumps, such as those offered by March or Chugger, with ½" connections for recirculation purposes.

Once the boil is complete, insure that all hose connections are liquid tight and secured with hose clamps, to verify liquid tight connections; open both ball valves in the recirculation loop and inspect for leaks. One a secure, liquid tight connection is verified, turn on the pump. Within seconds, you will notice a circular, whirlpool action beginning to form.

You may whirlpool as long as you would like, and even add other ingredients such as Whirlfloc, irish moss, or additional hops as called for by your recipe. After the subsequent 5-10 minutes or when you would like to begin your transfer to your fermenter, shut off the pump, close all ball valves, and divert your connection to your chiller and/or fermenter.