



Ss BREW KETTLE

— BREWMASTER EDITION —

[Quick Reference Guide](#)

Stainless Steel Prep

Pre-Clean: Prior to first time use, thoroughly wash all surfaces of the kettle, including the valve and TC fittings, with Tri-Sodium Phosphate (TSP) in hot water, mixed to the manufacturer's recommendations. Scrub with a soft terry cloth, and after the initial TSP wash, rinse thoroughly and dry all surfaces.

Passivation: It's good practice to periodically passivate all stainless steel equipment with an acid based solution to establish a uniform passive oxide layer that will maximize corrosion resistance. Following the pre-clean step, fill the kettle with Star San at a concentration of 1 ounce per gallon at 70-80°F for 30 minutes. **Moving forward, for best stainless performance, passivation should be performed at least once a year or anytime you believe you may have inadvertently scratched the surface.**

Cleaning and Sanitizing: As part of a regular cleaning regimen both pre and post-boil/mash, wash the interior surfaces of your kettle with an alkali cleaner such as PBW at a ratio of 0.75 ounce per gallon.

What's in the Box

- Kettle
- Lid
- ½" TC Sight Glass Ball Valve
- Ball Valve Racking Arm
- (3) TC Clamps
- (3) TC Gaskets
- (2) TC Caps

Kettle Assembly

Once the initial pre-clean step is complete, begin by locating the TC clamps, gaskets, and caps. We have included caps for the tangential whirlpool and thermometer ports when these accessories are not in use. Begin by capping these locations using the included TC fittings to form a liquid tight seal.

Next, locate the ½" TC sight glass ball valve, and the remaining TC clamp and gasket. Install the ball valve so that the handle is pointed in the upright position. Then locate the kettle racking arm, and insert the arm from the inside of the kettle. As a best practice, use a small amount

of Star San solution to lubricate the racking arm's O-rings before inserting it into the valve. Doing so will extend the life of the O-rings.

Before brewing, its best to align the racking arm with the ball valve's handle so that a reference point exists when rotating the valve. Beginning with the valve pointed upward, there is a full 180 degrees of rotation in to avoid the pickup of hops or trub during knock out.



Installation of the Optional Thermometer: If they have already been installed, begin by removing the included TC cap from the thermometer port. Once removed, locate the TC kettle thermometer and reinstall so that the temperature marks are clearly visible.

Installation of the Optional Whirlpool Accessories: We have designed the BME kettle to accept modular TC fittings to divert the flow of wort and create a uniform whirlpool and trub cone. Equipment configurations can vary, so we will offer two examples of establishing a correct whirlpool recirculation loop.

In the first example the recirculation loop will be left in place without a ball valve during the length of the boil, this setup is ideal for users with a dedicated brew kettle pump and want to avoid tying up the use of the kettle's main sight glass ball valve. A whirlpool tee fitting, TC thermometer, ½" ID silicone tubing, hose clamps, and ½" TC barb fitting will be required for the install to work correctly.

Begin by installing the optional whirlpool tee fitting at the thermometer port location, and then install the TC thermometer opposite the port location, so that the thermoprobe extends into the kettle. Then attach a length of ½" ID silicone tubing from the whirlpool tee fitting's barb to the pumps inlet. Lastly, run a length of ½" ID silicone tubing from the pump's outlet to the ½" TC barb fitting and secure that to the kettle's tangential inlet.

In the next example, the recirculation loop will utilize two valves to control the flow of hot wort from the kettle. This setup is ideal for users utilizing a single pump for their entire brewhouse. This setup also allows the user to install the recirculation loop temporarily post boil. A ½" 3-piece TC ball valve, ½" ID silicone tubing, hose clamps, and ½" barb fittings will be required for the install to work correctly.

Begin by running a length of ½" ID silicone tubing from the kettle's primary ½" TC sight glass ball valve to the pump's inlet. Then install the second ½" 3-piece TC ball valve at the tangential inlet location. Lastly, run another length of ½" silicone tubing from the pumps outlet, to the newly installed tangential inlet ball valve.

Once installed, both methods allow for the wort to be picked up from either the thermometer port or the main ball valve, and recirculate through the kettles integrated tangential whirlpool port.

Kettle Operation and Best Practices

Once cleaned and assembled, your kettle is now ready for use. The BME kettle was designed with advanced brewing practices in mind, and purpose-built to suit the needs of a boil kettle or HLT. It is not recommended to use your BME kettle as a mash tun since false bottoms are not available, however, the kettle is perfectly suited for BIAB brewing.

If you intend to use the vessel primarily as a boil kettle. The rotatable racking arm and sight glass are key features that will inhibit the transfer of break material, trub, and hop residue into the fermenter. For best results, immediately following the boil, create a whirlpool utilizing one of the methods explained above. The dished bottom and tangential inlet will assist greatly in fostering a smooth and consistent whirlpool, free of cavitation.

The effectiveness of the racking arm to avoid trub pickup is dependent on creating a trub cone in the center of the vessel. Furthermore, finning agents such as Whirlfloc or Irish moss can also be used to assist in the process of coagulating break material. This process is especially important for brewers that typically utilize whole or leaf hops, since they can easily clog the kettle's racking arm.

If you plan to utilize a propane or gas burner, take care to insure that the burner is sized appropriately. Ensure that the kettle is centered directly over the burner, and for stability, always make sure that the dish bottom and outer fire box skirt are both in contact with the burner's stand.

Direct flame or heat that comes into the contact with the ball valve or thermometer can cause damage to the thermometer's and/or ball valve's interior seals. Always brew on a flat, nonflammable surface.

During the first use with your kettle, the outer fire box skirt will change in color due to the high heat of propane or natural gas burner. This should be considered completely normal and will not affect the operation or longevity of the vessel.

The BME kettle utilizes a robust stainless dished bottom which has not been tri-clad, as such it is not compatible with induction burners.

Lastly, while our kettles are designed to be lifted while full, never attempt to lift a kettle that contains hot liquid due to the risk of injury or scalding to yourself or others. As a solution, utilize a wort pump to transfer hot liquids and avoid injury.

USE THE FOLLOWING WITH CAUTION:

- Stainless steel scrubbing pads or Scotch-Brite pads. If used too aggressively, abrasive pads can damage the surface and/or finish of the stainless.
- Oxalic Acid cleaners such as Bar Keeper's Friend, Kleen King, or Revere Ware Stainless cleaners on the etched volume markings or etched logo. They may cause the markings to fade.

NEVER USE THE FOLLOWING:

- Chlorine bleach or chlorine based products. Chlorine can cause pitting of stainless steel, or pin holes through the surface which cannot be repaired.
- OxiClean or other peroxide cleaners in combination with hard water. These can cause calcium carbonate to precipitate onto the surface. If this happens re-passivate your Chronical.

If you have any further questions about your Ss Brewtech gear go to our website and take a look at our extensive knowledgebase in the FAQ section. Over the years it has become a treasure trove of information. If after searching our FAQs, you still can't find an answer to your specific question, please email us at support@ssbrewtech.com.



— Optional Whirlpool Valve and Thermometer available on www.SsBrewtech.com —

