



ENGINEERING BETTER BEER

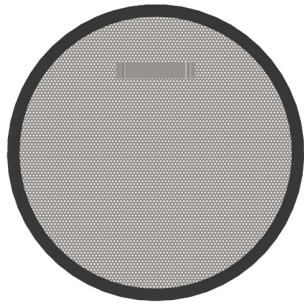
TC InfuSsion Mash Tun | Product Guide

COMPLETED ASSEMBLY

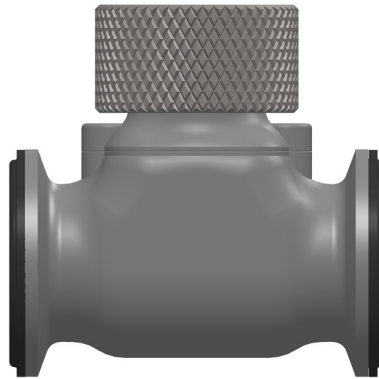


OVERVIEW

IN THE BOX



(1) False Bottom



(1) Ss Pure Flow Valve



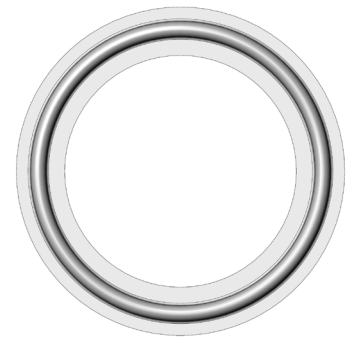
(1) LCD Thermometer



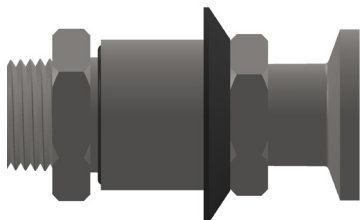
(1) 1.5" TC Thermowell



(2) 1.5" TC Clamp



(2) 1.5" TC Gasket



(1) 3/4" TC Mash Tun Bulkhead



(1) Lid with Gasket



(1) InfuSsion Mash Tun

Stainless Steel Prep

Pre-Clean: Prior to first time use, thoroughly wash all surfaces of the mash tun, including all valves and 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 mash tun 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 after use, wash the interior surfaces of your mash tun with an alkali cleaner such as PBW at a ratio of 0.75 ounce per gallon.

Mash Tun Assembly

Installing the False Bottom: Begin by removing the mash tun from the box and accessing the false bottom located directly beneath the vessel, sandwiched between the layers of EPE foam. Locate the black silicone false bottom seal and begin to slowly work it onto the outer edges of the false bottom so that the smooth side is orientated up, or on the same side as the false bottom's lifting handle and the stepped side is facing downwards. Install the assembled false bottom into the vessel, double checking the smooth side of the flanged seal is facing upward and making uniform contact with the inner mash tun wall.

Installing the Thermowell and LCD Thermometer: Using the included 1.5" TC Gasket and 1.5" TC Clamp, install the TC Thermowell into the top TC port on the front of the Mash Tun.

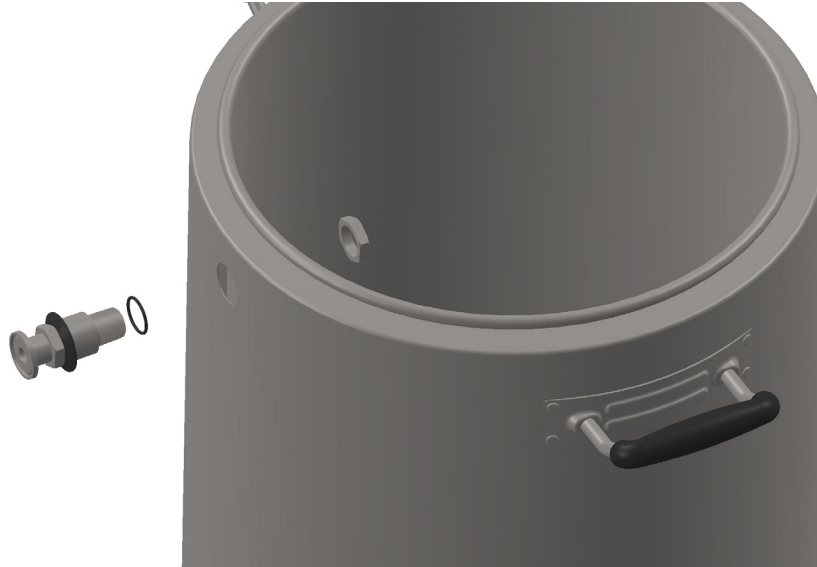
Once the thermowell is in place, feed the thermoprobe into the thermowell, and slide the silicone boot over the thermowell as far as possible.

Installing the Pure Flow Valve: Using the included 1.5" TC Clamp, install the Pure Flow Valve onto the bottom TC port on the front of the Mash Tun.

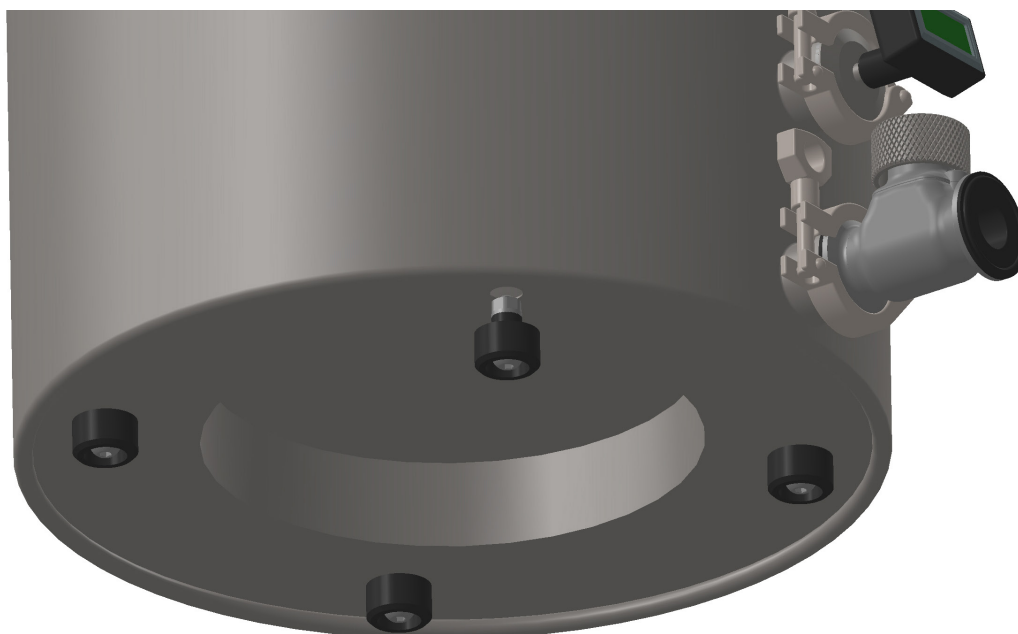
INSTRUCTIONS

Mash Tun Assembly (CONTINUED)

Installing the TC Recirculation Bulkhead: Locate the 3/4" TC Mash Tun Bulkhead from the accessory kit. Unscrew the bulkhead and install through the upper recirculation port as shown. Tighten the bulkhead onto the Mash Tun until just past snug.



Installing the Feet: Locate the four rubber feet from the accessory kit. On a flat, non-marring surface, place the Mash Tun on its upper rim, allowing easy access to the underside. Insert the feet into the four pre-drilled holes on the bottom of the Mash Tun. Tighten the screw on each foot to secure the foot to the Mash Tun.



Operation and Best Practices

The Infusion Series Mash Tuns are designed specifically for the infusion mash method. In an infusion mash process, a fixed amount of strike water volume is heated to a specific temperature, and then the grain is introduced during mash-in. The temperature difference of the grain and water will balance out to a new temperature, which is ultimately the mash rest temperature.

A pre-heat step is recommended to establish temperature uniformity within the mash tun so that the vessel does not inadvertently draw heat away from the grist. This will suppress unwanted temperature variations or heat loss during the duration of the mash rest. To perform a pre-heat step, heat a volume of water that is equivalent or greater than your full mash volume (strike water + grist) to 180 degrees, transfer to the mash vessel, and allow temps to stabilize over 15-20 minutes. You may want to save this preheat water for sparging or for cleaning later on in your brew day.

The Infusion Mash Tun is configured with a gradually sloped 5-degree bottom to allow fine particles of grain to collect and “stick” to the outer surface. Furthermore, the sloped bottom is a zero-deadspace design, which will ultimately maximize wort collection. Lastly, the small diameter center drain tube is designed to create a high velocity run-off, even at relatively low flow-rates. This high velocity quickly flushes any fine particles of grain from the tube during the vorlauf process.

Notes on Efficiency: Extraction efficiency is dependent on many variables such as water chemistry, PH, and grain bill contents to name a few. Most of the variables are not a direct result of the Mash Tun itself. However, to improve your brewhouse efficiency, beure to mill your grist properly, balance your water chemistry so that your mash PH is within the preferred limits of 5.3-5.7, and most importantly run-off slowly. The Ss Infusion Mash Tun is designed to operate with a run-off velocity up to 1.5 inches/minute. Which is equal to about 1.4 gallons per minute of run-off. You can increase your efficiency by slowing down the run-off. Yet, run-off rates at less than 0.5 inches/minute are generally consider to be slower than necessary. Lastly, run-off rates greater than 1.5 inches/minute will be less efficient and could run the risk of a stuck sparge.

Run-Off and Grain Bed Depth: While grain depth plays a very minor role in efficiency, it has a very direct effect on the quality of your run-off. We have included a chart to help you understand the optimum grain depth. A grain bed which it too thin, will not properly filter mill finings from the run-off. A grain bed which is too thick, will require you to run-off slower to avoid a stuck sparge due to the weight of the grist.

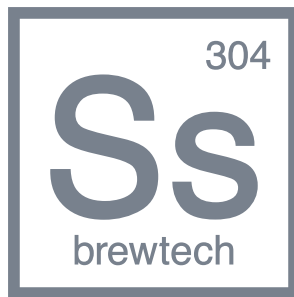
INSTRUCTIONS

USE THE FOLLOWING WITH CAUTION:

- 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 stainless steel.
- 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.
- Stainless steel scrubbing pads or Scotch-Brite pads. If used too aggressively, abrasive pads can damage the surface and/or finish of the stainless



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