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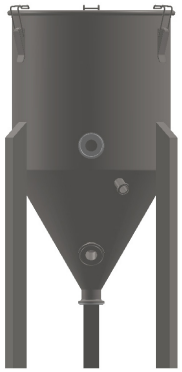
Ss

brewtech

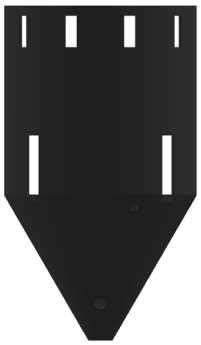
ENGINEERING BETTER BEER

Chronical 2.0 | Product Guide

IN THE BOX



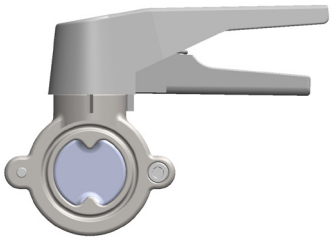
(1) **Chronical Body**
(7 gal model shown)



(1) **Neoprene Jacket**

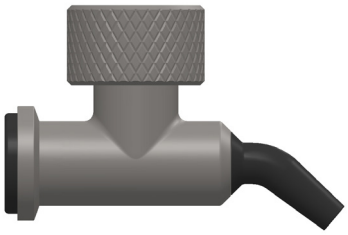
(1) **6” TC Domed Lid with Gasket**

(1) **6” TC Chiller Coil**

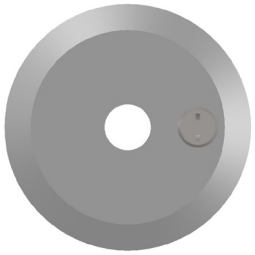


(2) **1.5” TC Keyed Butterfly Valve**

(1) **1.5”TC Keyed Racking Arm Gasket**

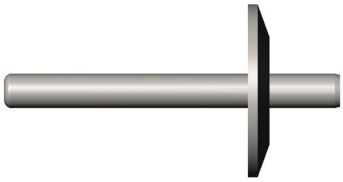


(1) **¾” TC Sample Valve**



(1) **Cap I 3” TC with ½” Blow-Off**

(1) **Digital Thermometer**

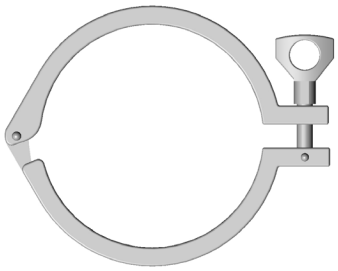


(1) **1.5” TC Thermowell**

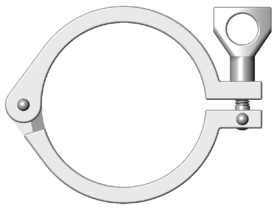
(1) **1.5” TC Elbow**

(4) **Tank Adjustment Foot**
(only (3) for 7 gal Chronical)

IN THE BOX (CONTINUED)



(1) **6’ TC Clamp**



(1) **3” TC Clamp**

(4) **1.5” TC Clamp**

(1) **¾” TC Clamp**

(1) **6” TC Gasket**

(1) **3” TC Gasket**

(1) **1.5” TC Gasket (1in ID)**

(2) **1.5” TC Gasket**

STAINLESS STEEL CARE

INITIAL CLEANING AND PASSIVATION

Pre-Clean: Prior to first-time use, thoroughly wash all surfaces of the vessel, including all valves and fittings, with Tri-Sodium Phosphate (TSP) in hot water, mixed with the manufacturer's recommendations. Scrub with a soft cloth (don't use anything abrasive) and after the initial TSP wash, rinse thoroughly and dry all surfaces. Check out our TSP Cleaning FAQ knowledge base article for more info!

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 vessel with hot water (at 140-180°F) mixed with Citric Acid (at a concentration of 4% by weight) for at least 30 minutes (up to 2 hours.) Drain, dry, and rinse with purified water. Most tap water contains various salts and chlorides (either naturally or for taste) which can undermine the passive oxide layer you just worked to create. Check out our Passivation FAQ knowledge base article for more info!

BREW DAY

Cleaning and Sanitizing: As part of a regular cleaning regimen, both pre and post-fermentation, wash the interior surfaces of your vessel with hot water an alkaline cleaner such as PBW. Then sanitize with hot water and an acid-based sanitizer like Star San. Check out our Cleaning FAQ and Sanitization FAQ knowledge base articles for more info! Please review dosage and disposal requirements for all chemicals before use.

https://ssbrewtech.zendesk.com/hc/en-us/articles/202239329-Before-Using-Your-Equipment-Cleaning-Guide

USE THE FOLLOWING WITH CAUTION:
-Stainless steel scrubbing pads or abrasive scouring pads. If used too aggressively, abrasive pads (like Scotch-Brite Green Heavy Duty scour pads) can damage the surface and/or finish of the stainless. Non-scratch scouring pads are recommended (like Scotch-Brite Blue non-scratch scour pads.)
-Oxalic Acid cleaners such as Bar Keeper's Friend, Kleen King, or Revere Ware Copper and Stainless Steel Cleaner 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 pinholes 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.

INSTRUCTIONS

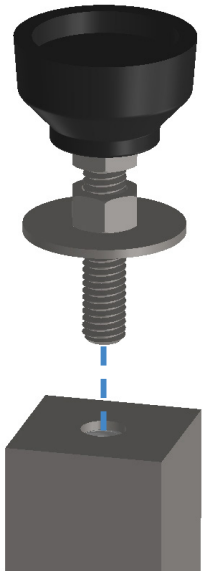
ASSEMBLY

1.Begin by completely removing the Chronical and all accessories from the box. Then place the vessel upside down on a flat, stable, non-marring surface.

2. Locate the neoprene insulation jacket from the packaging. Orientate the jacket so the Ss Brewtech logo lines up with the front of the vessel, then align the legs with the jacket's leg hole cutouts. Slowly work the jacket onto the vessel, carefully making sure that each ferrule is brought through its appropriate cutout.

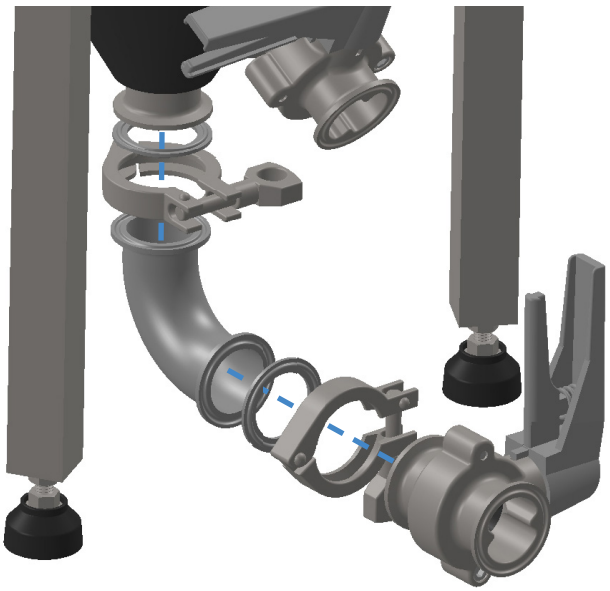
3. With the vessel still upside down, thread the stem of each of the four adjustable feet (three feet on the 7 gal model) into the Chronical's threaded leg inserts.

The adjustable feet should be installed with the washer first, so that it sits against the leg, and then the leveling nut. This enables the user to adjust the height of the vessel and then lock the feet in place. Turn the vessel right side up and place the vessel on the newly installed feet.



4. Locate the (2) keyed butterfly valves, (1) 1.5" TC 90-degree elbow, (2) 1.5" TC clamps, (1) Keyed Racking Arm Gasket, (2) 1.5" TC gasket.

Start by installing the included 1.5" TC 90-degree elbow onto the vessel's lower 1.5" TC ferrule, located at the very bottom of the cone. Locate one of the butterfly valves and install it onto the opposite end of the 90-degree elbow using a 1.5" TC Gasket and 1.5" TC Clamp.

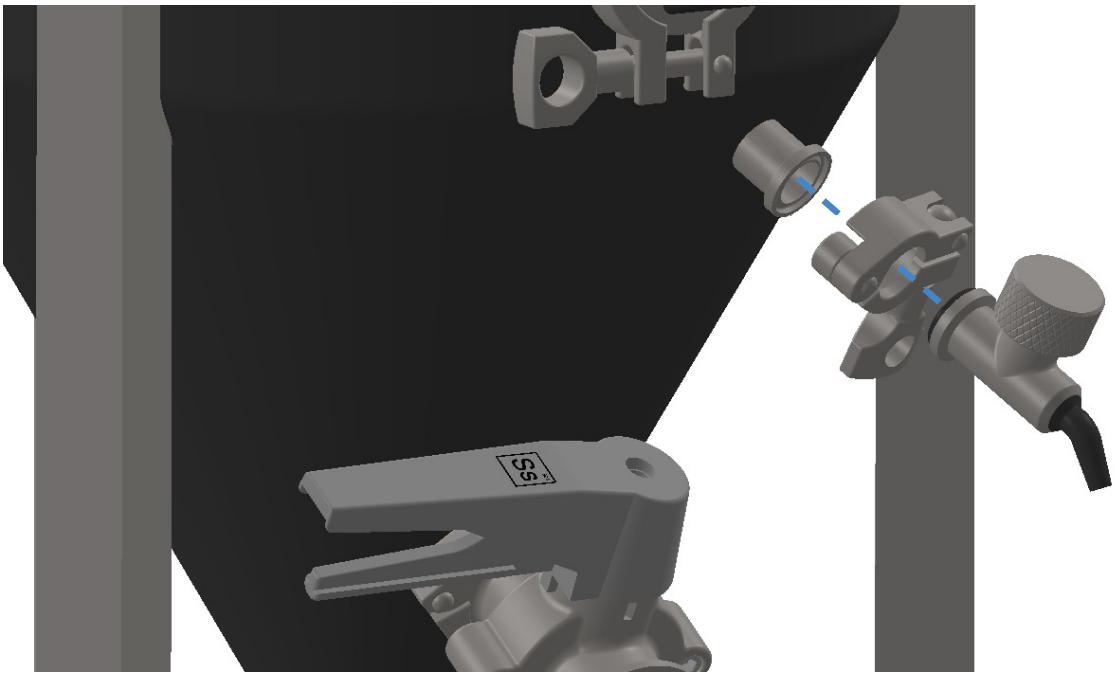


ASSEMBLY (CONTINUED)

5. Next, install the keyed racking arm gasket into the other butterfly valve as shown below. Finally, once assembled, feed the racking arm butterfly valve assembly into the 1.5” TC ferrule located just above the dump valve assembly and secure it with a TC clamp.

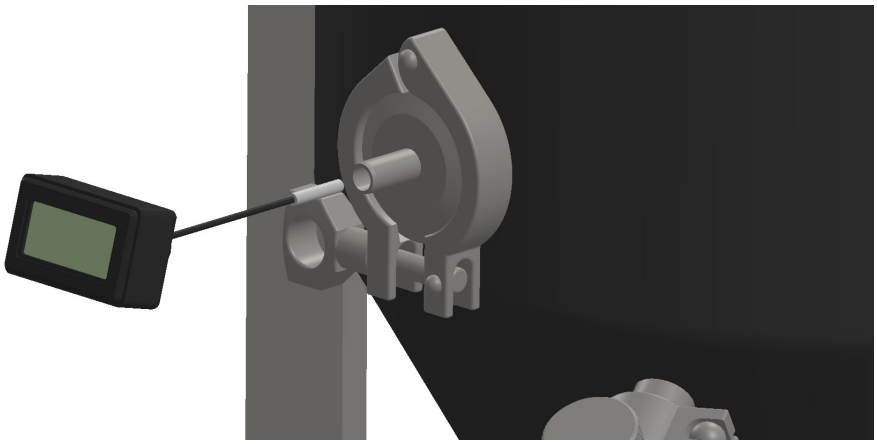
6. Locate the sample valve, thermowell, (1) 1.5” TC clamp, (1) 1.5” TC gasket (1” ID), and (1) 3/4” TC clamp.

Install the sample valve using a ¾” TC clamp in the far right ¾” TC ferrule on the vessel’s cone.



ASSEMBLY (CONTINUED)

7. Locate the thermowell, and install it into the center port using the same method using the 1.5” TC gasket and clamp. Once the thermowell is in place, install the included CR2032 battery into the LCD thermometer. Then install the LCD assembly into the included silicone boot. Lastly, feed the temperature sensor into the thermowell, and seat the silicone boot as close to the thermowell’s TC flange as possible.



8. Locate the Chiller Coil, Cap I 3” TC with ½” Blow-Off, (1) 3” TC Clamps, and (1) 3” TC Gaskets.

Install the ½” blow-off barb on the 3” TC cap. Next, install the cap onto the 3” ferrule located on the backside of the vessel’s chiller coil. (Fig. A)

Finally, locate the 6” TC gasket, 6” TC clamp, the assembled Chiller Coil, and the domed lid with gasket.(Fig. B)

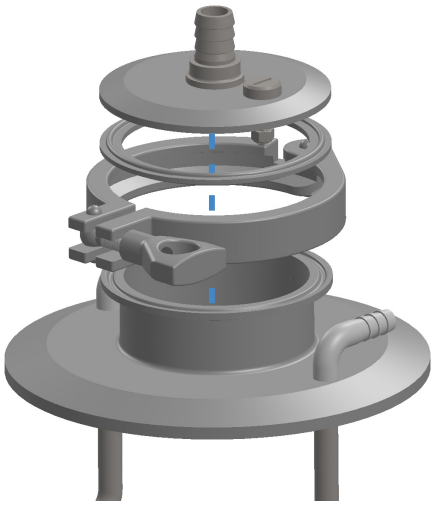


Fig. A

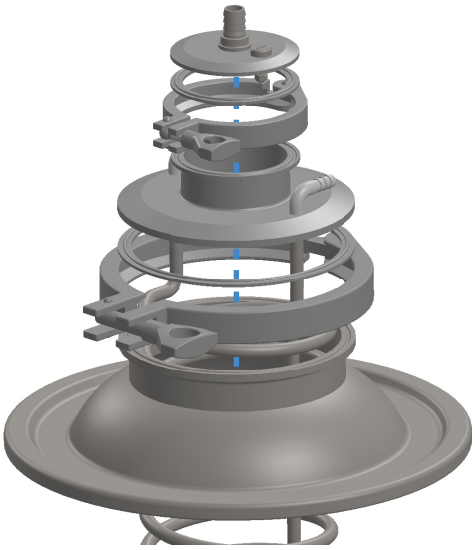


Fig. B

9. The Chronical is now fully assembled and ready for use.

OPERATION

The Chronical fermenter features a 3” tri-clamp (aka TC) top ferrule that can operate as a port for our optional clean-in-place (CIP) spray ball, optional blow-off cane, or the included blow-off barb/pressure release valve combo. Furthermore, this 3” TC port allows the user to practice some more-advanced brewing practices such as dry-hopping or adding adjuncts without having to remove the entire lid.

Unlike ball valves, the butterfly valves included with your Chronical fermenter were designed with zero dead space, meaning that there are no crevices for bacteria or yeast to hide. As a result, standard cleaning and sanitation practices should ensure proper operation without complete valve body disassembly

Be mindful that butterfly valves create a much larger fluid passageway than a comparably sized ball valve. As a result, familiarize yourself with how quickly fluid transfers and dump operations occur with water before fermenting your first batch. This will ensure that you don’t inadvertently release more liquid than originally intended when operating the valves.

Once the fermenter is cleaned, sanitized, and prepped for fermentation, we recommend that you orient the racking arm so that it is aligned opposite to the butterfly valve’s squeeze trigger, as shown in Step 5 of the Assembly instructions. We recommend orienting the assembly so that the racking arm is pointed down during active fermentation; a clog could ensue if trub and yeast settle into the racking arm’s opening. After fermentation is complete, when rotating the butterfly valve to reposition the racking arm in the upward position for kegging or bottling, take care to only loosen the tri-clamp slightly to allow for smooth rotation. Over-loosening the clamp could result in a leak and/or spillage.

INSTALLING A BLOW-OFF

Intense fermentations will require a blow-off tube to adequately vent the build-up of CO2 from within the vessel. Run a length of ½” silicone tubing from the included lid cap’s ½” barb to a small container of sanitizer to complete the air-lock. As an alternative option to silicone tubing, we offer an optional stainless blow-off cane that integrates seamlessly with the Chronical’s 3” TC lid port.

TRUB DUMP AND YEAST HARVESTING

Two key features of all Chronical fermenters is the ability to dump trub and harvest yeast. Once primary fermentation has begun, we recommend that users dump trub using the lower dump valve within the first 48 hours to prevent solidification of break material. A typical trub dump will result in the loss of about 1-2 pints.

A cleaner sample of yeast can now be harvested since the majority of the trub has been removed. There are many different techniques to harvest yeast but for the purpose of this guide, we’ll detail a simple but effective way that doesn’t require any specialized equipment.

Generally, yeast should be harvested from a conical fermenter toward the end of primary fermentation and up to a day or two after fermentation ends. The longer you wait, the more compacted the yeast cake can become thus making it more difficult to get the yeast to flow during collection. Exactly when to harvest will vary depending on several factors so plan on doing some experimentation to get your process and timing just right. To harvest yeast, place a small, sanitized container under the bottom dump port. Be sure double check your blowoff tube is in a location that won’t cause sanitizer to be pulled into your beer.

OPERATION (CONTINUED)

Next, slightly open the butterfly valve to allow the yeast to slowly flow out the valve and into your container. Note, yeast flows slower than other liquids so be patient. If the valve is opened too quickly or too far, tunneling can occur through the yeast cake which can suddenly overfill your container, create a mess, and prevent you from collecting any more yeast for a period of time. The yeast collected should look creamy and off-white in color with no dark areas or obvious signs of trub. While not strictly necessary, a yeast wash step may be desirable if a lot of residual trub makes it into your yeast collection vessel, but we'll leave that up to you to decide.

PRESSURIZED TRANSFERS

Ss Brewtech does not recommend lifting full or partially full tanks. Tank handles should only be used to move tanks between batches. Instead of moving the Chronical for gravity transfers, Ss Brewtech recommends performing pressurized transfers.

Full details on how to perform a pressurized transfer can be found in our Pressure Transfer / Kegging Guide in the link below. The included 3" TC cap, 1/2" barb, and pressure release valve (PRV) make setting up a pressurized transfer a very easy process. You will just need to provide CO2 tank, low pressure regulator, hose clamps and a way to adapt your gas tubing to fit the 1/2" Blow-Off barb

https://www.ssbrewtech.com/pages/guides

Typically, only 1-1.5 psi is needed to transfer beer over to your keg(s). Using pressures higher than 1-1.5 psi to transfer fluid from your Chronical may result in damage to your unit or personal injury. Also, keep in mind that transferring to a keg/vessel that is located much higher the fermenter and/or the use of an in-line filter greatly increases the pressure required to transfer the beer, and as such both of those situations should be avoided.

If you have any further questions about your Chronical, be sure check out our website and take a look at our extensive knowledge base in the Support section. If after searching our FAQs, you still can't find an answer to your specific question, please submit a ticket to our support team.

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