

#### Overview

The BrewZilla 200L User Manual is designed to outline the basic usage of the brewhouse. As a result, not every use case may be covered.

It's highly recommended to familiarize yourself with the operation of the brewhouse with a trial run just using water before first use. This will allow you to become familiar with the operation process, and allow any needed adjustments or troubleshooting.

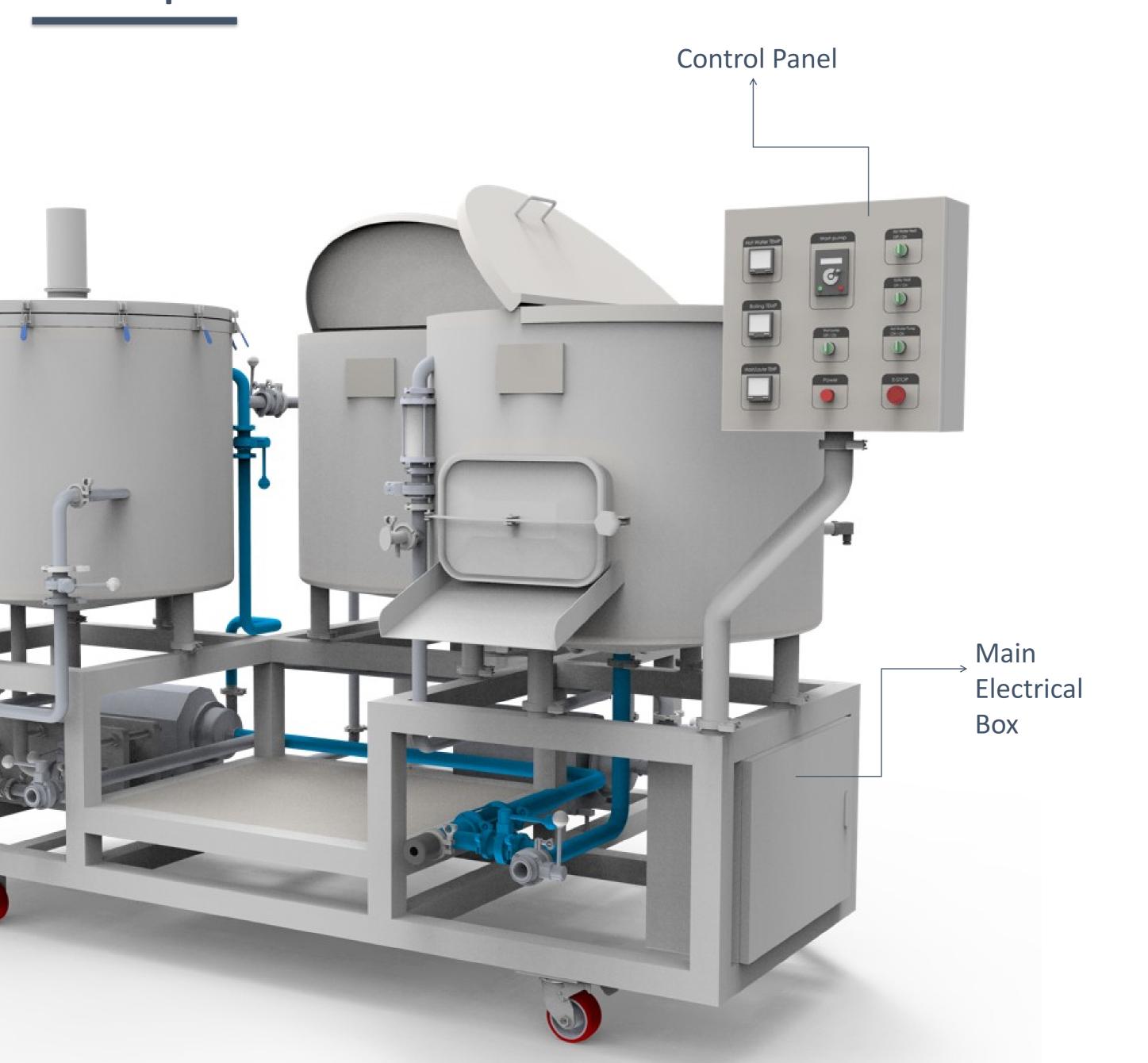
Please contact KegLand for further technical support if required..

Happy brewing!

Cheers!



### 1. Set Up



Design Power Standard: 400V, 50HZ, 3 Phase

This product is pre-wired and tested before shipment.

A licensed electrician is required to install the correct outlets.

Total consumable power(maximum) is:

12KW (kettle/whirlpool) + 12KW(Hot water tank) + 5kw (RIMS) + 0.55KW(wort pump) + 0.55KW(hot water pump) + 0.1KW (Control cabinet) = 30.2 kw

#### Warning:

- Always turn off the mains power before servicing the electric box
- Do not open the panel when the brewhouse is operating

#### 2. Control Panel

The Control Panel is attached by tri-clamps and can be moved into a suitable position. Do not remove Control Panel.



## 3. Starting Tips

#### Pump:

There are two sets of pumps on the brewhouse system. The left side is the wort pump, used for transferring wort between tanks.

The right side is the hot water pump, used for transferring hot water from HLT into your brewhouse tanks.

#### Note:

A: liquid inlet

B: Liquid outlet

DO NOT OPERATE THE PUMP DRY.

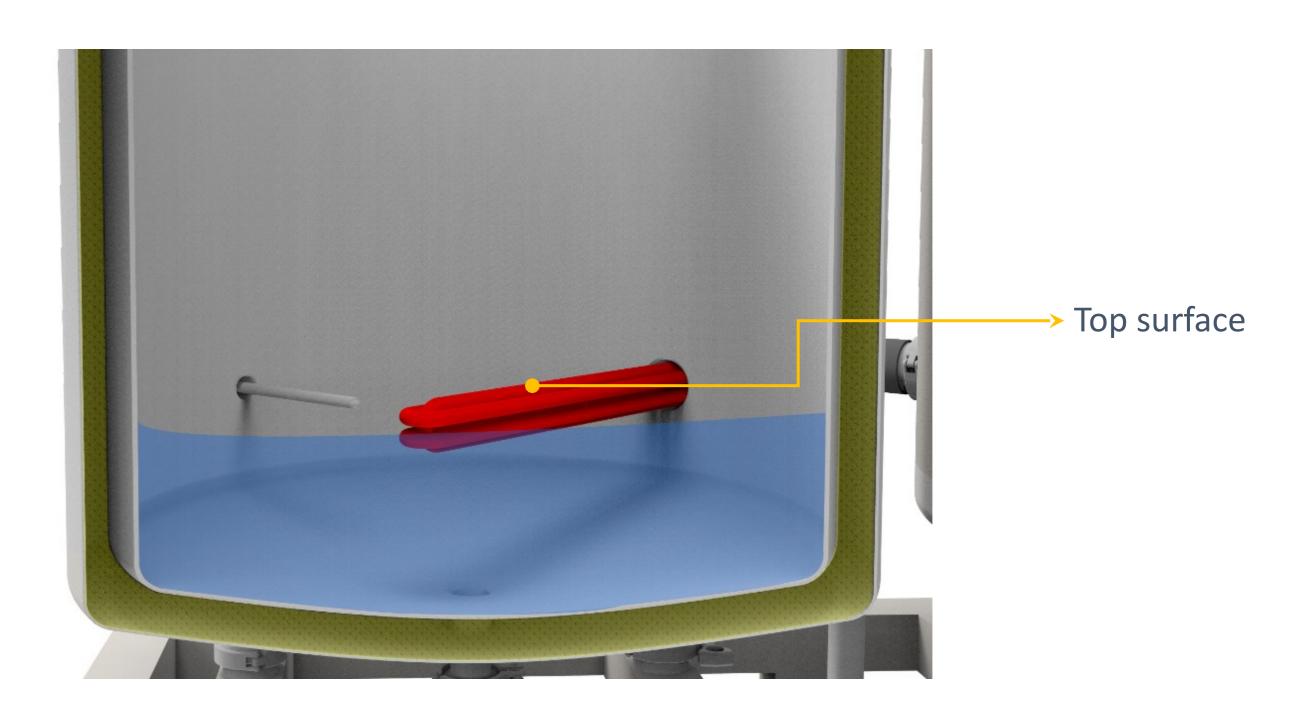


#### **Electric Heating Element:**

There are 2 sets of elements in the HLT and Kettle.

Please ensure that all elements are turned off before powering up the brewhouse.

Ensure that the element is fully covered before turning on, in order to avoid potential damage or scorching.



# 4. Filling HLT

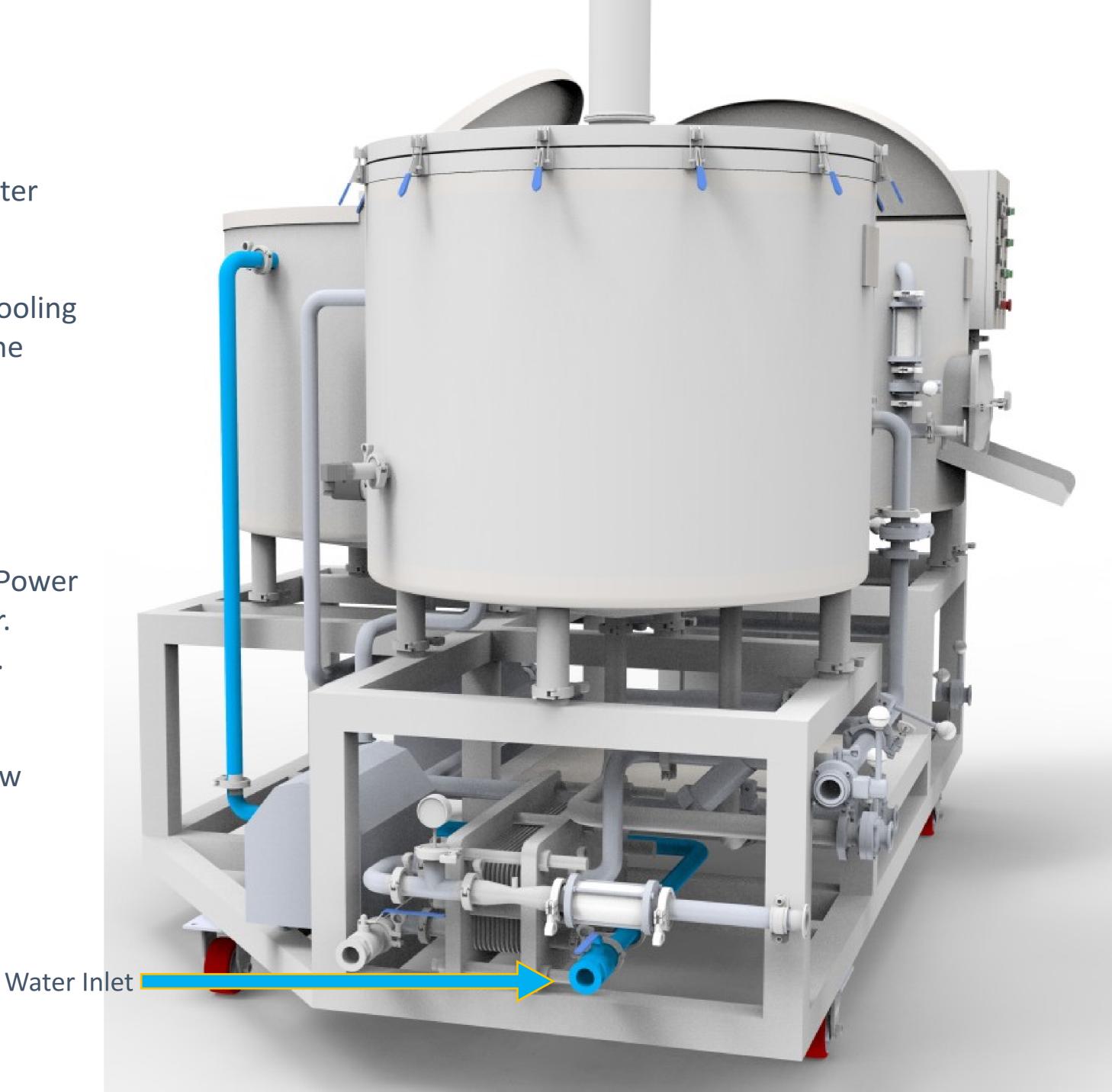
The pipeline marked in blue is for adding the initial brew water into your HLT.

With the ball valve closed, it can also be used to cycle the cooling water from Plate Heat Exchanger back into the HLT during the knockout process.

Once the desired volume is reached, close off this pipeline. Power on the Hot Water Heat button to begin heating up the water. The temperature is displayed on the Hot Water TEMP panel.

#### Tips:

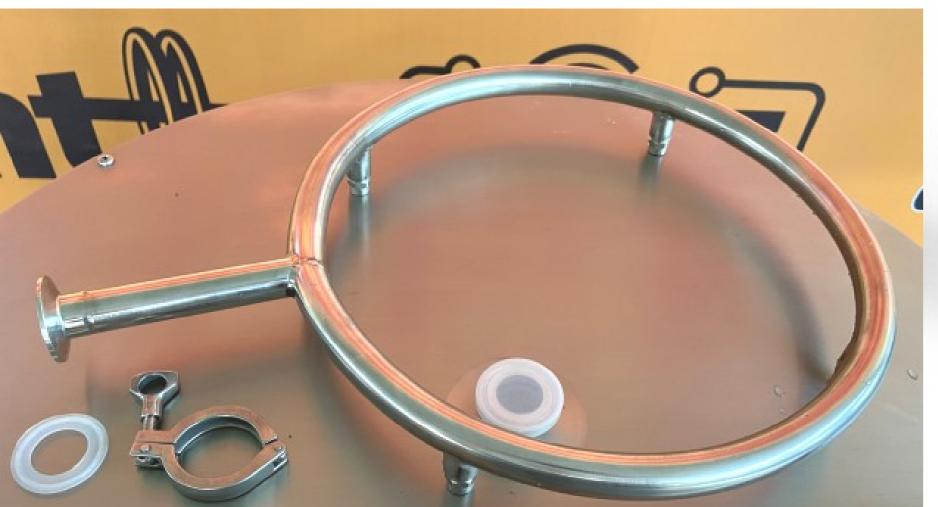
Its a good idea to have an extra 10% water in the HLT to allow for other uses – washing, sparging etc.



# 4. Filling HLT

The ring inside the Mash Tun (coloured blue in the diagram) Is for Sparging Water.

This is connected by a tri-clamp. Remove the Sparging Ring before adding malt to the Mash Tun. Replace when it is time to sparge.





### 5. Mashing In

This is the first step to start the brew day. Please make sure your malts are milled and ready to use before this step.

Add the desired amount of strike water to the Mash Tun. Add the grains and ensure they are thoroughly stirred.

The flow speed is controlled by a butterfly valve on the side of the Mash Tun (coloured blue in the diagram). Ensure that the valve is open before operating the Hot Water Pump

#### Tips:

Ensuring that the Mash Tun is properly heated will help minimise temperature loss when mashing.

This can be achieved by circulating hot water from the HLT.



## 6. Recirculation

Wort recirculation is a process that will help improve the clarity and quality of your wort.

To recirculate during the mash, open the valves in the is pipeline first. Then gradually power on the wort pump to allow the wort to recirculate from the bottom of the Mash Tun to the top.

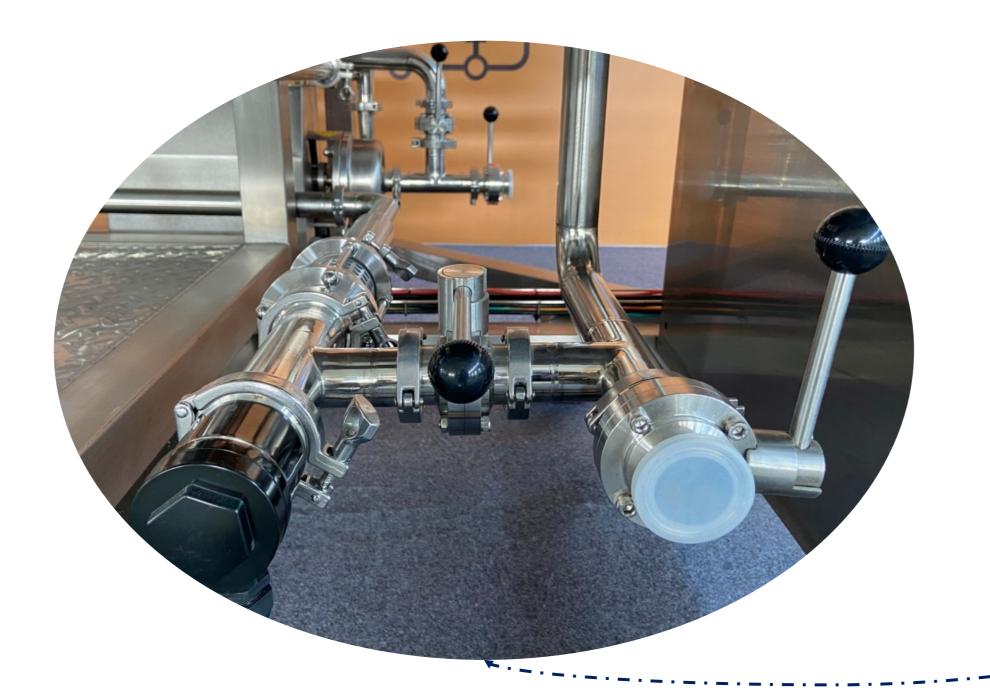
The clarity of the wort can be observed through the sight glass.



# 6. RIMS (Recirculating Infusion Mash System)

A RIMS (Recirculating Infusion Mash System) uses direct heat on the tube to heat the wort as it is recirculated.

The 200L BrewZilla can be converted to a full RIMS setup with the addition of KL22996 – 6kw RIMS Heater







### 7. Lautering

Once the mashing process is completed, it's time to lauter your wort into the kettle.

Open all these valves (coloured blue in the diagram) before switching on the wort pump. Monitor flow rate etc before opening the pumps fully.

Button number 1 (see diagram) powers on the pump. The rotary knob (Number 2 on the diagram) controls the flow rate on the VFD panel, from 1 to 50 (maximum flow).

#### **Attention**:

Keeping the VFD under 20 is recommended to avoid stuck mashes and other issues.





## 8. Sparging

Sparging is the process of "rinsing" the grains to maximise efficiency and get enough wort in the kettle.

First, reattach the sparge ring back into position. The liquid flow rate is controlled by the valve.

The BrewZilla 200L uses fly or continous sparging, widely regarded as the most efficient method of sparging.

The best result is achieved if the speed of the sparge is close to that of the lauter into the kettle.

Start sparging when the wort is around 50mm above the grain bed.





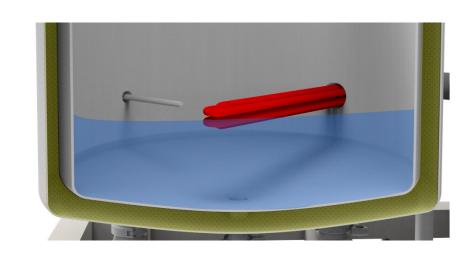
### 9. Boiling

The boil can be started as soon as the element in the kettle is fully submerged during the lautering process.

To begin the boil, turn the Kettle element ON, and set the temperature to 100°C.

#### **Attention:**

1. Ensure that the elements are *completely* submerged before turning on heating...



- 2. The pump can also be used to help protect the elements from scorching. Keep the VFD set to between 10-20, and ensure the valves in this diagram are fully opened..
- 3. Add hops according to the recipe.



### 10. Whirlpool

Whirlpooling is the best way to minimise the risk of clogging the heat exchanger, and to maximise the clarity of the transferred wort.

Open the valves in this diagram *before* powering on the wort pump. As with wort re circulation during the mash, slowly increase the speed of the VFD controller of the pump to the preferred value.

#### Tips:

1. Remembering that the wort will still be at or near 100°C, please be careful.

2. Always remember: Power on and increase the wort pump transferring speed *slowly*.

3. Keep Wort Pump running for around 10 minutes, When the wort produces a natural swirling vortex, the pump can be stopped leaving a natural whirlpool for 30 minutes until liquid is still.

Now you will get a natural cone in the centre of the kettle tank.

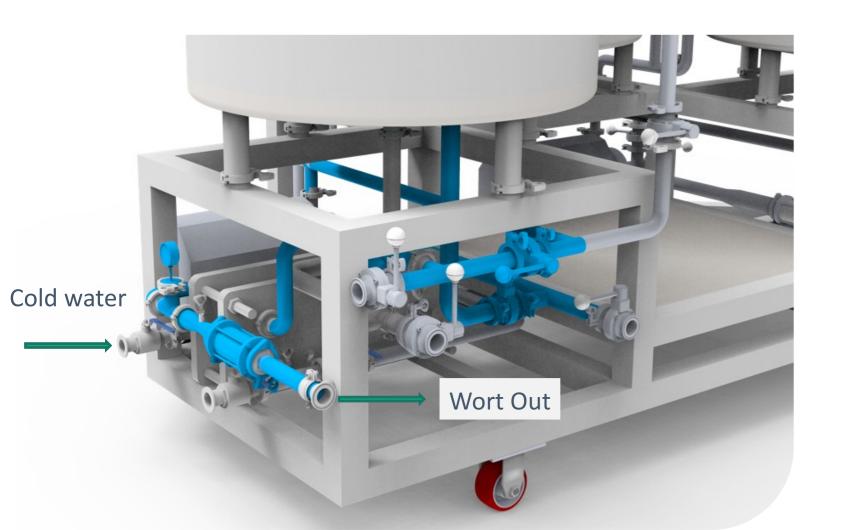


# 11. Knocking-Out

After around 30 mins of whirlpooling, the wort can be knocked out through the plate heat exchanger into the fermenter. Sanitise all tubing and the fermenter before transferring.

#### Tips:

- 1. Connect hose on the outlet of heat exchanger and the bottom drain port of your fermenter (see diagram)
- 2. Connect your cold water source to the heat exchanger water inlet port (see diagram)
- 3. Open the valves in the diagram to allow the wort to be pumped through the heat exchanger.





### 11. Knocking-Out

Before engaging the knockout pump, ensure that the cold water inlet *and* outlet are firmly connected. Water from the outlet can be drained or captured back into the HLT for use in brewing.

Once the cold water flow is established, open the knockout valves and switch on the wort pump. As before, start at a slow flow rate and increase gradually. We suggest keeping the flow rate at 10 or under, to ensure the wort passes through the heat exchanger at a slow enough rate to cool.

During this process, you can monitor the temperature on the gauge as below, adjusting the wort pump speed or valves to control flow speed until you get the desired degree of cooling. The wort can be oxygenated through the air inlet before the sight glass (if needed).

When the desired volume in the fermenter is reached, or before the wort level in the kettle drops below the outlet, turn off the wort pump immediately and close off all valves on the brewhouse and fermenter.



