

BrewFerm Brew Day Guide

Heating Mash Strike Water

Adding Mashing Grains

Mash Recirculation

Draining / Sparging (if applicable)

Boil

Whirlpool

Chilling

Fermentation Setup

 **WATCH BREW DAY GUIDE**



Brew Day Guide

Heating Mash Strike Water

The purpose of this step is to fill the BrewFerm with an allocated amount of water and heat to a designated temperature ready for adding your crushed grains for mashing.

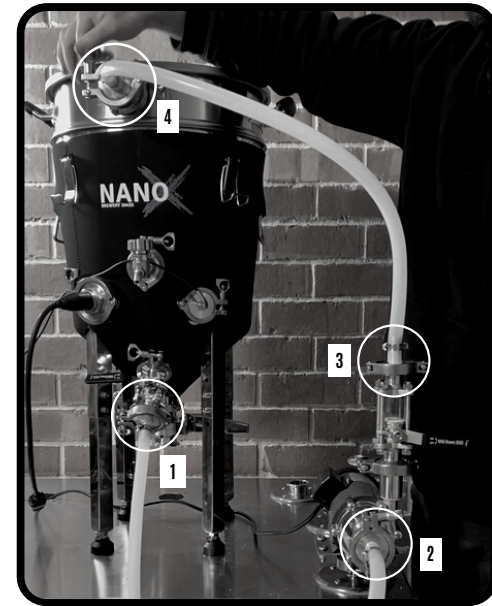
1. With all the valves closed, fill the BrewFerm with the amount of water required for mashing according to your recipe. Using a measuring jug or inline flow meter will help determine the water volume.
2. After BrewFerm is filled with the designated amount of water, insert the BrewFerm Malt Pipe.
3. Connect hoses to the BrewFerm and Pump (Figure 1)

Attach a hose from the whirlpool valve (1) of the BrewFerm to the inlet of the pump (2).

A hose from the outlet of the pump (3) to the inlet of the mash recirculation valve (4).

***Please Note:** Figure 1 Shows 65W Pump Upgrade

Figure 1



4. Open both the whirlpool valve and the flow valve on the pump and allow water to gravity feed through the pump and remove any air out of the pump head.
5. Place your controller temperature probe into the BrewFerm thermowell and plug your element into your controller. Set your designated mash temperature based on your recipe. Turn on your element
Inkbird Controller: Refer to user manual
NANO Boss Controller: Refer to user manual
6. Reduce the BrewFerm flow valve to 25%. Turn on your pump and allow the BrewFerm to recirculate & heat to reach the designated mashing strike temperature

Brew Day Guide

Adding Mashing Grains

The purpose of this step is to add all of your crushed brewing grains to the BrewFerm hot water ready for the mash recirculation process.

1. Once your strike water is at the designated mash temperature, turn off pump & heating element and close both the whirlpool valve (1) and the flow valve (2) on the brew pump (Figure 2)
2. Remove the BrewFerm Malt Pipe Lid and set aside
3. Slowly begin to add your crushed grains into the BrewFerm Malt Pipe (Figure 3) at intervals and stirring in between to remove any unwanted clumps of grain that forms (dough balls).
4. Once all grain is added and the mash is mixed thoroughly to remove dough balls, move onto the Mash Recirculation process.

Figure 2

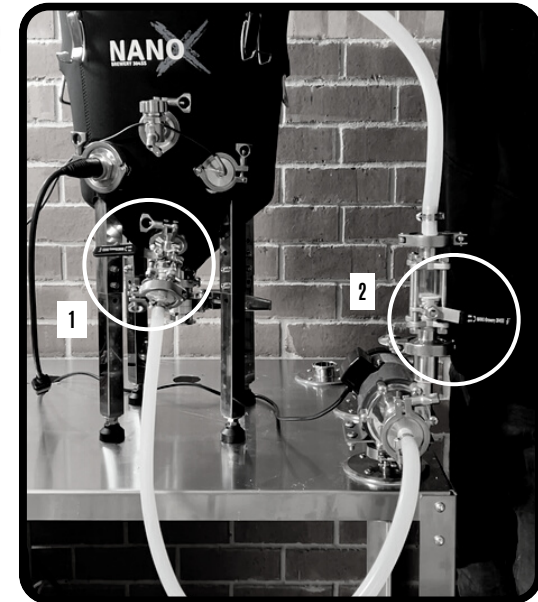


Figure 3



Brew Day Guide

Mashing & Recirculation

The purpose of this step is for the hot water to convert grain starches into sugar. To aid in this process, mash liquid is recirculated from the whirlpool valve of the BrewFerm and back over the top of the grain mash bed. This recirculation process also helps to improve mash efficiency and wort clarity.

1. Open the open both the whirlpool valve (1) on the BrewFerm and the flow valve (2) on the brew pump. Allow water to gravity feed through the pump to remove any air from pump head (Figure 4)
3. Adjust the flow valve on the pump to around 25% (Figure 5) and turn on pump. Monitor the flow for the first few minutes. Ideally you want keep around 1-2cm of liquid on top of the grain mash bed.
4. Adjust the flow valve if required to keep the recommended amount of liquid on top of the mash bed. Try to keep your flow rate consistent throughout the mashing period.

Figure 4

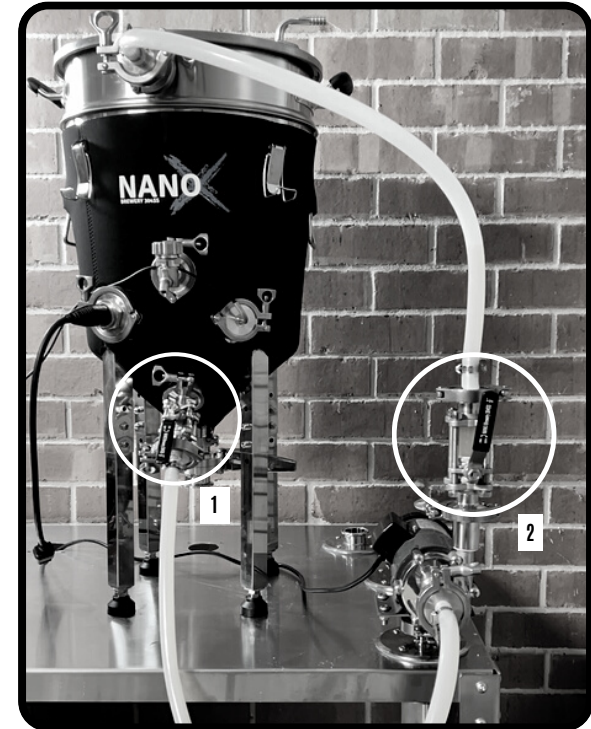


Figure 5



Brew Day Guide

Draining / Sparging

The purpose of this step is to drain the liquid (wort) away from the grain. The sparging process (optional) involves adding additional water over the top of the grain bed to further help rinse the sugars away from the grain and into the liquid.

1. At the end of your mashing time turn off the BrewFerm pump and close the whirlpool valve & flow valve on the pump
2. Setup the BrewFerm for draining (Figure 6) by first disconnecting the hose from the whirlpool valve (1) and attaching to the bottom drain valve. Now disconnect the hose from the malt pipe inlet valve (2) and attach to the whirlpool flow valve (1)
3. Slowly lift the BrewFerm Malt Pipe and using the integrated Malt Pipe Hooks, rest the Malt Pipe on the edge of the BrewFerm and allow to drain (Figure 7).
4. Remove malt pipe from the BrewFerm and dispose of grains
5. **Optional:** At this point you can proceed to sparge the grains with additional water to help rinse as much sugar from the grains as possible.

Figure 6

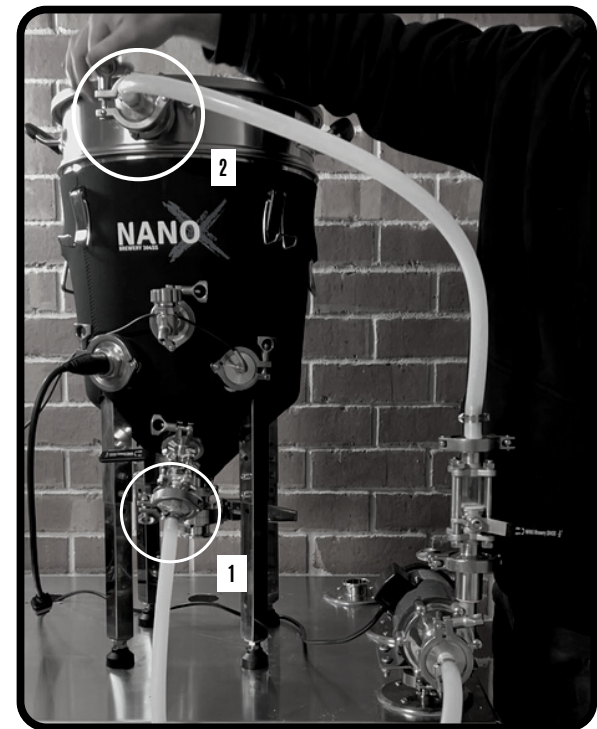


Figure 7



Brew Day Guide

Boiling

The purpose of this step is to boil the wort & add hops to the BrewFerm at varying stages to impart both bitterness and flavour to the wort.

1. Set the controller to boiling (Refer to controller user manual) and let the wort reach boiling.
2. Once at boiling, add hops to the wort according to the timing on your recipe.
3. With 10 minutes remaining in the boil, open the bottom drain valve (1) and whirlpool inlet valve (2) on the BrewFerm (Figure 9). Open the flow valve on the pump (3) but leave pump off (if using a counter flow chiller in-line, turn pump on at this point for 5 minutes to sanitise lines and chiller).

*This step will allow wort to sanitise your pump and lines prior to the whirlpool process

4. Continue to add hops according to your recipe throughout the boil.

Figure 8

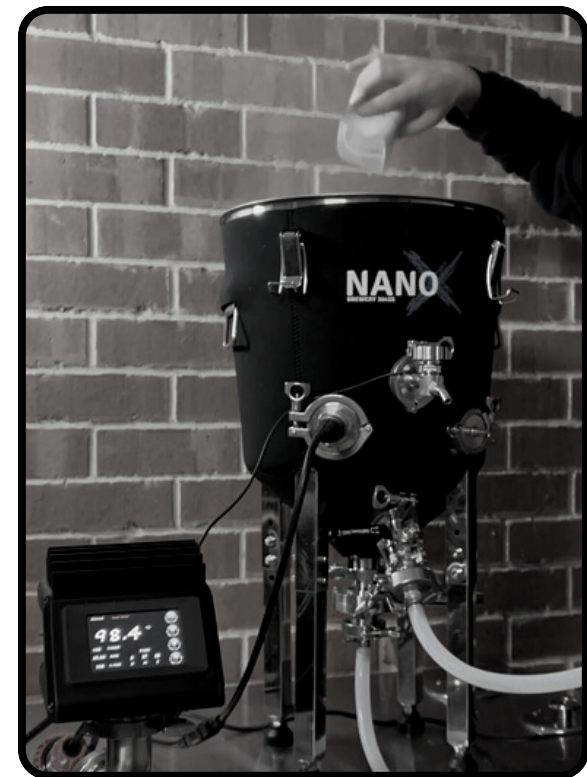
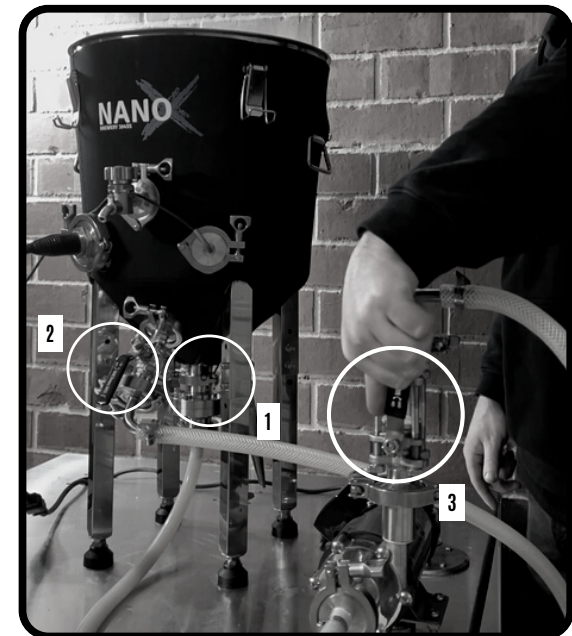


Figure 9



Brew Day Guide

Whirlpooling

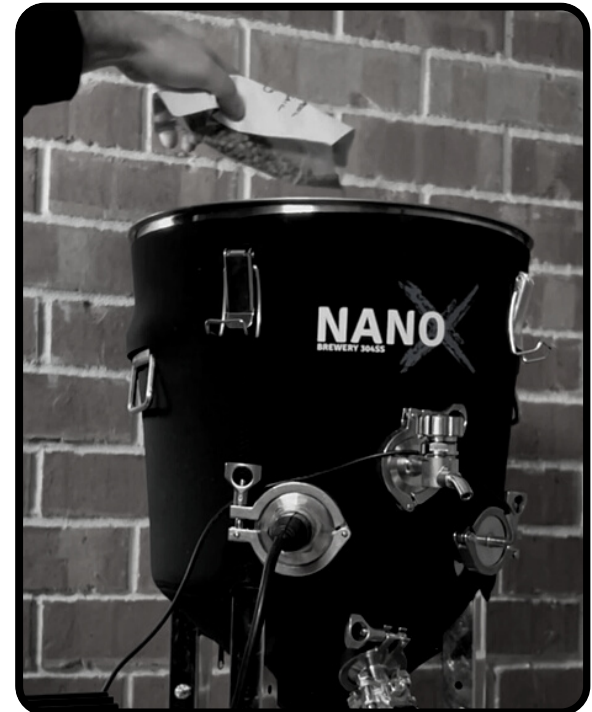
The purpose of this step is to move wort through the pump and back into the BrewFerm to create a circular “whirlpool” motion which helps solid hop and wort material settle at the bottom of the BrewFerm.

1. At the end of the boiling period, turn off element and set the pump flow valve to around 25%.
2. Turn on the BrewFerm pump and allow the wort to begin to whirlpool. Slowly increase the flow valve to 100% to create a fast whirlpool motion. Leave to whirlpool for 10-15 minutes
3. Proceed to add your whirlpool hops additions at the start of the whirlpool process (if applicable) (Figure 11)
4. At the end of the whirlpool period turn off pump, close the bottom drain valve, whirlpool inlet and flow valve. Allow wort to sit for 5 minutes which will help all sediment and solid material to settle in the bottom of the BrewFerm cone.

Figure 10



Figure 11



Brew Day Guide

Chilling

*Immersion Chiller

The purpose of this step is to chill the wort down from boiling to yeast pitching temperature for fermentation. Ensuring you are pitching your yeast at the correct temperature is vital for yeast health and a high quality fermentation.

*Please note that chillers are purchased separately to the BrewFerm and therefore chilling processes may vary.

1. With 10 minutes remaining in the boil, hang your immersion chiller off the edge of the BrewFerm body and into the boiling wort. This will ensure your chiller is sanitised prior to the chilling process.
2. When your whirlpool process is complete, connect water to your immersion chiller, turn on water and begin to chill the wort

*At this stage you can remove all hoses connected to the pump and BrewFerm. Set aside for cleaning.
3. Monitor the temperature of the wort via your controller screen.
4. When the wort has reached yeast pitching temperature, turn off water, disconnect hoses to the chiller and remove immersion chiller from the BrewFerm.

Brew Day Guide

Chilling

*Counter Flow Chiller

The purpose of this step is to chill the wort down from boiling to yeast pitching temperature for fermentation. Ensuring you are pitching your yeast at the correct temperature is vital for yeast health and a high quality fermentation.

*Please note that chillers are purchased separately to the BrewFerm and therefore chilling processes may vary.

1. With 10 minutes remaining in the boil connect your counter flow chiller in-line between your pump and the whirlpool in-let
2. Open bottom drain valve, flow valve (25%) and whirlpool valve. Turn on pump and allow to recirculate for 5 minutes to sanitise all lines, pump and counter flow chiller
3. Proceed through to the whirlpool process as normal.
4. At the completion of the whirlpool period, keep the whirlpool running, connect up water hoses to the counter flow chiller and turn on water to begin chilling.
5. When the wort has reached yeast pitching temperature, turn off water, disconnect hoses to the chiller and BrewFerm. Set aside for cleaning.

Brew Day Guide

Chilling

*Pressure Chilling Lid

The purpose of this step is to chill the wort down from boiling to yeast pitching temperature for fermentation. Ensuring you are pitching your yeast at the correct temperature is vital for yeast health and a high quality fermentation.

*Please note that chillers are purchased separately to the BrewFerm and therefore chilling processes may vary.

1. With 10 minutes remaining in the boil, attach your pressure chilling lid to the BrewFerm. This will ensure your chiller is sanitised prior to the chilling process.
2. When your whirlpool process is complete, connect water to your pressure chilling lid, turn on water and begin to chill the wort.

*At this stage you can remove all hoses connected to the pump and BrewFerm. Set aside for cleaning.
3. Monitor the temperature of the wort via your controller screen.
4. When the wort has reached yeast pitching temperature, turn off water & disconnect hoses to the chiller.

Brew Day Guide

Yeast Pitching & Fermentation Setup

The purpose of this step is to ensure your fermenter is setup for fermentation and ready to have yeast pitched for fermentation.

1. After the chilling process is complete, leave to allow trub to settle into the cone of the BrewFerm. After settling period, place a suitable container under the drain valve. Open drain valve to remove trub from the BrewFerm (Figure 12)
2. Pitch Yeast: In the opening on the BrewFerm lid, pitch your selected yeast strain and connect on the included BrewFerm Blow-off elbow (Figure 13).
3. Place the BrewFerm in your dedicated fermentation space. Attach on the included blow-off hose to the blow-off elbow and direct the other end into a container of sanitised water (Figure 14).

Figure 12



Figure 13

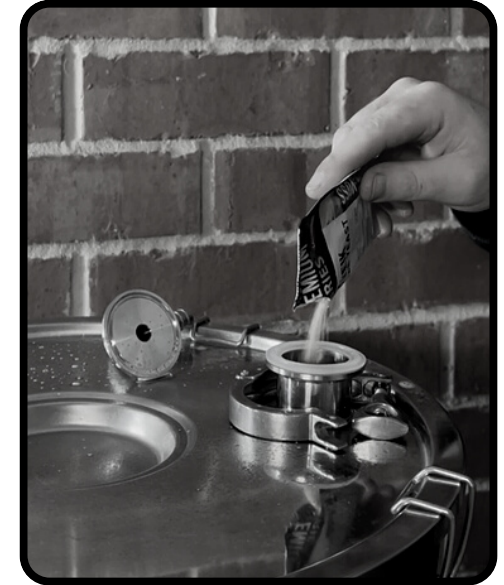


Figure 14

