THE UNOFFICIAL ANVIL FOUNDRY BREWERS BIBLE

Anvil Foundry 6.5 & 10.5 Allin-One Brewing Systems



Bill Burns



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PRE-PURCHASE QUESTIONS

Why should I buy the Foundry over another all-in-one unit?

Most people have purchased it for one or more of the following reasons.

- Awesome Facebook group with lots of support from Anvil users.
- Backed by a reputable company (Blichmann Engineering) with an excellent customer service record.
- Better, more accurate temperature probe during mash than other units in this price range.
- Price (half the cost of others and for 240v option, the argument could be made that it's 2.5 to 3x cheaper than others)
- I tried brewing with Kettle on the Stove and just wasn't cutting it. Price point is allowing me to get my feet wet and decide if regular brew days are in my future. I also noticed that some of the Pros are using it, so I can definitely grow with it.
- Ease of voltage configurations with no cord cutting required. This is the only All in one I could find, that lets you choose between 120v and 240v. You have the option to bring the Foundry to friends' brew days and run it on their 120v circuits while still allowing 240v for your own use.
- Triple Element, Dual voltage, Ultra Low Watt Density Heaters When you convert to 240v, you get the benefit of 2800w heater @12Amps! when you look at other units from competitors, they are using dual element high wattage heaters.
- The grain basket is all 1 piece, unlike grainfather and a few others where I kept seeing reviews saying what a pain in the butt it was to get the rubber ring on and in place.
- Active youtubers have quite a few videos on brewing with the Anvil.
- Easy and relatively cheap to turn into a distiller which allows you to collect 95% of the possible alcohol from the wash.
- Accuracy on hold temps (double wall insulated kettle means no insulation jacket required)
- Rotating racking arm, very helpful and no other competitor has it!
- Higher grain capacity than most units in this price range. Up to 16lbs of grain on the 10.5 System (recommended). Other Foundry owners have claimed up to 22 lbs and reported 65% efficiency. (more info later)
- Foundry brewers can control power from 0% to 100% and everything in between for fine tuning. A few other units only allow 5% increments.

Anything else I should purchase while I'm ordering?

- 1. I'd suggest keeping spare o-rings, washers and seals for the Foundry on hand at all times. You can order those from Anvil at the same time you order your Foundry.
 - a. Bucket Fermentor/Foundry Valve O-Ring Kit
 - b. Thrust washers for Anvil Pump (if using Anvil Pump)
- 2. A pH meter for measuring wort pH. This is a must if you want respectable efficiency numbers
- 3. A quality hydrometer with test tube and/or refractometer for measuring wort SG & FG. Glass breaks, especially when you're dealing with wet hands and lots of moving parts. Perhaps you'll feel better having two hydrometers or a hydrometer and refractometer on hand so you'll always have a backup.
 - a. For refractometer info, you'll want to read this: All About Refractometers

Can the Foundry be used for extract brewing too?

Absolutely, the Anvil Foundry is perfect for both Extract & All Grain brewing. I have brewed multiple extract beers in my unit.

For those using the Foundry for extract brewing, be sure to turn the power to the burner off before adding the extract. Otherwise, there is a VERY HIGH probability of buildup and scorching to occur which will cause an E3 error code.

Are there any Youtube Channels related to Brewing with the Anvil Foundry?

Yes, we have a few active Youtubers on our **Anvil Facebook group**.

- 1. Short Circuited Brewers
- 2. <u>Bitter Reality Brewing</u>
- 3. Hops & Gnarly

Has anyone compared the features of the Foundry with other all-in-one systems?



	ANVIL Foundry 10.5 gal	ANVIL Foundry 6.5 gal	Robobrew V3 120V	Robobrew V3 240V	Brewers Edge Mash & Boil	Grainfather
FEATURES						
Volume	10.5 gal gross, 5 gal batch size	6.5 gal gross, 2.5-3 gal batch	9.25 gal gross, 5 gal batch size	9.25 gal gross, 5 gal batch size	7.5 gal gross, 5 gal batch size	8 gal gross, 5 gal batch size
Grain Capacity	16 lb	8 lb	16 lb	16 lb	16 lb	16 lb
Voltage & Power	Switchable dual voltage capable 1600W @ 120V AND 2800W @ 240V	Switchable dual voltage capable 1600W @ 120V AND 2800W @ 240V	1500W @ 120V	2400W @ 240V	1600W @ 120V	1600W @ 120V
Temperature Control Precision	Maintains +/-1 F	Maintains +/-1 F	Maintains +/- 5F	Maintains +/- 5F	Maintains +/- 5F	Maintains +/-1 F
Controls	Easy to use digital. Manual Step Mashing.	Easy to use digital. Manual Step Mashing.	Automatic Step Mashing.	Automatic Step Mashing.	Easy to use digital. Manual Step Mashing.	Automatic Step Mashing.
Instructions	Detailed step by step instructions with simple tables for water treatment and volumes needed.	Detailed step by step instructions with simple tables for water treatment and volumes needed.	Basic operation instructions and calculations only.	Basic operation instructions and calculations only.	Basic operation instructions and calculations only.	Basic operation instructions and calculations only.
Watt Density	Triple element very low watt density	Triple element very low watt density	Two element high watt density	Two element high watt density	Two element high watt density	Two element high watt density
Power Control	Solid State, linear digital 0-100%	Solid State, linear digital 0-100%	Mechanical relay, manual 500 or 1500W settings only	Mechanical relay, manual 500 or 2400W settings only	Mechanical relay, manual 600 or 1600W settings only	Solid State, no power control
Delay Timer	Yes	Yes	Yes	Yes	Yes	Yes
Rotating Racking Arm	Yes	Yes	No	No	No	No
Grain Basket	High flow design (side and bottom)	High flow design (bottom)	Basic perforated	Basic perforated	Basic perforated	Basic perforated
Recirculation Pump System	Optional external	Optional external	Optional internal	Optional internal	Optional internal	Standard integral
Insulation	Standard double wall	Standard double wall	Optional neoprene jacket \$20	Optional neoprene jacket \$20	Standard double wall	Optional neoprene jacket \$60
Chiller	High capacity stainless immersion	High capacity stainless immersion	Small stainless immersion	Small stainless immersion	Optional immersion \$70	Plastic/copper counterflow
Chiller Hoses	Included	Included	Optional \$20	Optional \$20	Optional	Included
Turbo 500 Distillation Ready?	Yes	Yes	Optional \$20 lid	Optional \$20 lid	Optional \$20 lid	Optional \$20 lid
Price Standard	\$369.99	\$274.99	\$299.99	\$479.99	\$299.99	N/A
Price with Recirculation	\$469.99	\$374.99	\$449.99	\$469.99	\$419.99	\$998.99
Price with Recirculation, Chiller, Hoses, Insulation	\$469.99	\$374.99	\$489.99	\$509.99	\$489.99	\$1,058.99

I see some units with the display up high and others down low. What's the difference?

Both units offer the exact same functionality. As of February 2020, all current Anvil Foundry systems (both 6.5 and 10.5 models) are manufactured with the display located high on the unit. Anvil moved the display up and at an angle so you don't have to lay on the ground to read it!

BATCH SIZE

Can I make a 2.5 gal batch in the 10.5 gal Foundry?

Yes you can. However, depending on the option you choose, there may be a couple of small sacrifices.

Option #1: if you are using the anvil malt pipe (basket). The first is that there may not be enough grain to cover the side perforations on the grain basket. This will allow recirculating wort to bypass the grain bed and your wort will not clarify as it would with a deeper grain bed. In addition, you may experience a slightly lower mash efficiency.

Option #2: <u>Foundry Small Batch Adapter Ring</u> made specifically for smaller batches in the 10.5 by closing off the side perforations in the basket and only allowing wort to flow through the bottom perforations.

Option #3: Use a Bag with the grain basket or Wilser BIAB Bag https://biabbags.webs.com/ with a false bottom. Both of these work well, and I have used them personally to brew small batches.

I'm trying to decide between the 10.5 and 6.5 Foundry. I want to be able to brew small batch, what's the smallest batch you can brew with each?

The Foundry 6.5 Gallon system is designed for 3 Gallon Batches and a minimum batch size of 2.5 gallons. This is where homebrewers who regularly brew high gravity beers should seriously consider the larger 10.5 gallon Foundry for brewing. 16lbs of grain in a 2.5 gallon batch allows for some tasty higher gravity homebrews!

The Foundry 10.5 Gallon system is designed for 5.5 gallon batches and a recommended minimum batch size of 4 Gallons. However, Anvil also offers (see below) the <u>Foundry</u>

<u>Small Batch Adapter Ring</u> which takes the minimum batch size down to 2 Gallons on the larger Foundry 10.5 system by closing off the side perforations in the basket and only allowing wort to flow through the bottom perforations.

Bitter Reality Brewing tested the small batch adapter – <u>link here</u>



UNBOXING

I just received my Foundry, what are the first steps?

We recommend reading the manual (<u>linked here</u>) in its entirety. Read it twice... and then pay particular attention to the section about Power Source and tightening the Valve and Rotating Dip Tube Assembly.



Do I need to clean and/or passivate my new Foundry System?

Recommended to clean with (a blue no scratch scotch brite pad) and your favorite Brewery cleaner (PBW, OxiClean FREE, etc...) then rinse with hot water. As for passivating. Per John Blichmann: "All you **need** is to clean with PBW (Powdered Brewery Wash) and rinse with hot water. I do use Barkeepers



friend as it does brighten up the stainless. But to be honest, passivation is only super important after welding, and for Fermenters where they are cleaned in place (CIP)'d. Note that all you need to do is get the surface clean and free of manufacturing oils and



let it dry. The oxygen in the atmosphere does the passivating. For the Foundry, you do want the bottom heater surface free of soil and water scale so give it a good scrub with a blue scotch brite pad and barkeepers friend and you'll be fine." Avoid steel wool and any scratching of the bottom, as this can create areas for scorching and



allow for more problems long term. Still want to passivate? Brian, from Short Circuited Brewing has a video for that too! > Passivate Stainless using Bar Keepers Friend <

What about sanitizing/sterilizing?

Cleaning your equipment means that you have removed all of the visible dirt and residue on your equipment, but not living organisms.

Sanitizing means you have treated your equipment with a chemical solution (or heat) that will eliminate virtually all spoilage organisms (molds, wild yeasts, bacteria).

You MUST clean your equipment before sanitizing the equipment, since it is difficult to properly sanitize equipment with visible residue on it. The term "sterile" means the complete elimination of spoilage organisms, and is not realistic in the home brewing environment.

What should I avoid doing with my Foundry?

1. Avoid boil overs (it can ruin the Foundry display electronics if the boiling wort penetrates behind the screen)

- 2. Avoid running boiling wort through the Anvil pump google cavitation for further explanation.
- 3. Most household cleaners should be avoided, since either they are unsafe for human consumption (like bathroom and oven cleaners) or they are too mild (like dishwashing detergents) to effectively clean your brewery equipment. It is recommended to avoid bleach at all costs since it can destroy stainless surfaces.
- 4. DO NOT use OxiClean containing dyes or perfumes. OxiClean FREE is their only product free of dye and perfumes! More information here: Supercharge your OxiClean
- 5. Avoid steel wool and any scratching of the bottom, as this can create areas for scorching and allow for more problems long term.

Anything else I should do before brew day?

- 1. Many Foundry customers recommend to caulk (using 100% silicone) around the display to avoid boilovers/spills damaging the electronic displays.
- 2. Completely Assemble the Foundry, pump and return tube (if ordered) and Immersion Chiller hoses.
- 3. Run water through the immersion chiller and test for leaks. If you wait until brew day to test this, you may end up leaking water from the hoses into your finished wort and negatively affecting the original gravity.
- 4. Run a water test on the Anvil. Fill the unit with water to represent an 'average brew day' volume of strike water. (6.5 7 gallons should suffice for the 10.5 version)
- 5. Run a mock brew day while checking for leaks. Follow the steps in the <u>Foundry</u> <u>manual</u> **'BREWING STEPS, A QUICK REFERENCE'** paying attention to the time it takes to heat up to a boil.
- 6. If you ordered the recirculation kit with pump, or you have a pump, attach it to the Foundry, run it and check for leaks during this pre-brew day test.

POWER SOURCE OVERVIEW

How do I operate the Foundry on 240v?

Brian Short-Circuited has made an excellent video on this that explains most of the things you need to know to make the switch. This solution does **NOT** require you to cut-off the existing plug.

MILLING THE GRAINS

What is the ideal grain crush for the Anvil Foundry?

When referring to an "ideal grain crush" or mill gap setting, you want to adjust the gap to find a highly efficient setting to work for your system, but which is NOT crushed too fine to cause a stuck mash. Whatever path you choose, remember to stay consistent. If you normally mill your own grains, keep in mind that your efficiency on the Foundry may change when you rely on your LHBS or online retailer to mill the grains.

Recommend .040-.045 (1.02 - 1.14 mm) if using anvil stainless basket. Some brewers do test the limitations and go lower, your experience may vary.

Recommend .030-.035 (0.76 - 0.89 mm) gap spacing on the mill if using a Brew Bag inside the basket.

Pro Tips for Milling:

- If you don't have a feeler gauge to measure the gap, and you're using a brewbag or wilser bag, you may be able to use a credit card to help measure, which is about .030 inches (0.76 mm).
- If you're using the Anvil Grain Basket without a bag, Brian Short-Circuited suggested 4 business cards stacked on top of eachother resulting in approximately 1.0 mm spacing.
- If you don't have your own mill, you can request your Local Homebrew Shop (LHBS) or online vendor to run the grains through the mill 2x. We call this 'double-crushing the grains'.

BREWING

My efficiency sucks, what can I do to improve it?

Consistency in the brewing process (mash temps and volumes) is a bigger concern than efficiency as you get started brewing with your Anvil Foundry. Relatively small differences in your brewing process can have a big effect down the line. However, if you're sure that your process is consistent, and you're ready to tackle efficiency, the 3

most important factors to improving your efficiency are:

- 1. Proper grain crush (gap spacing on the rollers of .040-.045 inch (1.02 1.14 mm) if using Anvil stainless basket and .030-.035 inch gap spacing (0.76 0.89 mm) gap spacing on the mill if using a Brew Bag inside the basket. If you don't have your own mill, you can ask your Local Homebrew Shop (LHBS) or online retailer to run the grains through the mill 2x. We call this 'double-crushing the grains'.
- 2. Brewing Water/Water Profile
 - a. "Carbonate is considered the most important ion for all grain brewing. If carbonate levels are too low, the mash will be too acidic, especially when using darker malts (which have higher acidity). If carbonate is too high, mash efficiency will suffer. Recommended levels are 25-50 mg/l for pale beers and 100-300 mg/l for darker beers. Note that bicarbonates and temporary hardness can be reduced by pre-boiling the water the precipitate that falls out after boiling is primarily bicarbonate." Boondock Brewing
- 3. Acceptable Mash Temp pH. (5.2-5.4). This pH is measured at mash temperature and NOT at room temp (room temp measurement will be about 0.25 to 0.35 pH higher without ATC).
 - 5.2 to 5.4 (mash temp) / 5.45 to 5.65 (room temp)
 - 5.2 to 5.4 (mash temp) / 5.55 to 5.75 (room temp)
 Source: Setting the Record Straight on Mash pH BYO Magazine

Additional Factors which should improve efficiency

- 1. Adding 8 oz of rice hulls per 5.5 gallon brew to help open up the grain bed. (Do NOT mill the rice hulls)
- 2. Proper recirculating of the mash with a pump, ensuring the grain bed doesn't get too compacted and/or avoiding stuck mash.
- 3. Once grains are added and completed stirred, allow 10 minutes for grain bed to settle before barely opening up the valve for recirculating the wort.
- 4. Stirring the top 1/3rd of the grain bed at 15-minute intervals and inspecting for a stuck mash each time.
- 5. When mashing in, make sure the mash-in water is the proper temperature so that when mixed with the grist (grains), they will combine to reach the target "rest" or conversion temperature for the style of beer you are brewing.

6. <u>The iodine test</u> will determine whether there is any residual starch that lacks conversion. Lay a drop or two into a shallow sample of cool mash on a white dish. <u>Be sure no grain material is present</u>; this will yield a false positive. If the iodine color ranges from yellow to amber, conversion is complete. If the iodine turns dark purple to black, give the mash another 15 minutes and repeat the test.

I want to push the Foundry 10.5 and mash in using 21 lbs of grain. What should I expect?

The Anvil max grain bill is 16 lbs on the 10.5 Foundry. This limit does not mean you aren't allowed to push larger grain bills. However, every pound of grain you add above 16 will decrease your efficiency. If you want to brew higher gravity beers, you have a few options:

- 1. Load your grain pipe with up to 16lbs of grain and then use malt extract (LME or DME) to get the rest of your gravity points to your desired OG.
- 2. Or mash in your 21lbs of grain (understanding your efficiency may be as low as 50%) and then use your preboil gravity to calculate the amount of LME/DME you need to add to the boil to get your desired OG.
- 3. Decrease your batch size from 5 gallons down to 2.5 to 3 gallons. This is where those owners who regularly brew high gravity beers should seriously consider the larger Foundry for brewing.

Does everyone mash in at 100% power?

No, in fact, it's best to decrease the power to avoid large fluctuations in temperatures. The best method is:

- 1. Set your strike water temperature (strike water temp is a few degrees higher than your mash temperature because as you add the grains, the temperature will decrease)
- 2. Set the PWR to 100%.
- 3. Once you've reached your strike water temperature, adjust the temp on the display to your mash temperature.
- 4. Lower the PWR % to between 60-80% for 120v and 50-60% for 240v Foundry.
- 5. Begin mashing in.
- 6. When mashing in is complete, wait 10 minutes before starting the recirculation pump.

The temperature of the unit doesn't match my thermometer, why is that?

Ideally, if you are recirculating while checking the temps, the temperature difference should be minimal. The temperature probe is located in the bottom of the unit and is calibrated from the factory to reflect the temperature in the middle of the mash, so a temperature reading taken in the top 6" or so of the mash would read lower than that of the unit. Also note that the probe is calibrated for mash temperatures since those are the most important, so during the boil it may not be accurate.

My silicone gasket on the lid doesn't stay in place, what should I do?

There are a couple of options here:

1. Remove and clean the silicon remnants from manufacturing off of the lid with a sponge/dust free cloth and rubbing alcohol. Next step is to remove the silicone



from the gasket as gently as possible. Allow surface to dry thoroughly before applying sealant. Once the lid is clean and dry, add a 1/16" bead of RTV 4500 Food Contact Safe High Strength Silicone Sealant to the underside of the lid where the gasket will reside. Press the gasket into the groove and carefully flip the lid over and clamp it to your foundry. Allow it to dry for 24 hours.

2. Second Option is to just remove the gasket and put it in a safe place until you plan on fermenting or distilling in the Foundry. Unless you're fermenting in the kettle or distilling with the Foundry, the gasket is not necessary.

My unit is leaking from the ball valve, how do I fix it?

Generally, this is due to the valve being overtightened. Drain the water, remove the valve, inspect the seals and o-rings, and if everything looks good, hand tighten until snug.

It could also be due to under-tightening. Hand tighten the valve, fill half way with warm water, wait 20 minutes (which loosens everything) and then tighten another 1/8-1/4 turn with a wrench. The wrench tightening has never been necessary for me.



I measured x gallons of water into the Foundry and the water markings are off, is that common?

There have been reports that the markings are off, but it is unusual to be far enough off to cause any issues. Per John Blichmann, there is an expected tolerance of +/- 1 liter on the markings in the Anvil Foundry. First, ensure that your measuring device is accurate, the best way to do this is by weight. Use an accurate scale that can measure to at least 0.1lb. Use 8.34 lb when weighing out 1 gallon of water at room temperature (68° F). Once you have determined the accuracy of the markings, you can adjust (if needed).

Should I perform the sparge or no sparge method to get the best efficiency?

We have many brewers on both sides of this discussion. You'll hear many brewers say 'Efficiency is overrated, consistent and repeatable process is what you should be striving for when focusing on making good beer.' Those brewers usually compensate lower efficiency with a touch more grain. Several users in the <u>Anvil Foundry Brewers FB Group</u> have reported 70-75%+ Mash Efficiency with the <u>no sparge</u> method. Generally speaking, for many systems, sparging will result in higher efficiency because you're adding a step where you will be rinsing the mash grain bed to extract as much of the sugars from the grain as possible.

The manual says to rake only the top 1/3 of the grains during the mash, but it seems to me the top third is already loose so what's the point?

The idea is to break up any channels that keep from an even flow through the grain bed. If you were to stir the whole grain bed you would disturb the natural filter bed the grain provides and your wort would not clear. Excessive wort cloudiness can lead to problems later in flavor and clarity.

BOILING

My unit signaled with 5 beeps at 200° F what is this alarm for?

The 200° F, followed by beep-beep-beep-beep-beep occurs with all units. The 5 beeps, at 200° F, are to warn you to remove the lid and/or prepare for boil. The Foundry electronics are NOT sophisticated enough to detect boiling at ALL elevations. Therefore, the Foundry does signal a boiling alarm, but only if the probe measures 212° F. For those who may not be aware, with each 500-feet increase in elevation, the boiling point of water is lowered by just under 1° F. At 7,500 feet, for example, water boils at about 198° F. Brewers that live a significant height above sea level, will never hear the 'Boil' alarm. Many brewers, myself included, use an external temperature probe with alarm to measure and signal boiling temps at our respective elevation.

Does everyone boil at 100% power?

- For 120v units, I always set it at 100% power
- For 240v units, set the PWR to 100% until you hear the 200° F "getting close" alarm signaling. This is the warning to remove any lid/coverings.
- At 200° F Drop the power to 80-90% to maintain your rigorous boil

So, if I don't live at Sea Level, I won't hear an alarm when my unit has reached Boiling at say 209° F?

If you don't live at sea level, your 212° F 'boil' alarms will not signal. You'll have to monitor it using an external temperature device.

Why does my unit appear to boil at lower/higher temps than it did previously?

Barometric Pressure. As an example, even though charts will tell you that boiling at 6000 ft are 201.1° F, if the barometric pressure drops low enough, the boiling point lowers at the same elevation. At 6050 ft elevation and a Pressure of 29.86, water boils at 200.94 F. At the same elevation, but Pressure of 30.69, water will boil at 202.29° F. Remember, the Anvil is calibrated for mash temperatures, and may not be accurate at boiling temperatures, even though it is still boiling. My Anvil (according to my external probe) is off by 1-2° F at boiling when measuring the upper third of the water volume.

What are the heating rates of the Foundry?

Model	10.5 Gallon Foundry	6.5 Gallon Foundry		
Volume	6.5	4		
120v	1.5	2.4		
240v	2.6	4.3		

Heating rate expressed in degree per minute in Fahrenheit (° F)

What is the ramp up time for the 10.5 gallon Foundry?

This is going to differ for a plethora of reasons, from tap water temps, ambient temps, lid on/off during ramp up times, 120v vs 240v setups etc. Bill Burns has included his ramp up times on the Anvil Facebook page for his 10.5 Foundry when it's using the 120v configuration. Generally speaking, with the lid on during ramp up to mash in, it takes approximately 75 minutes to heat 6.5 gallons of strike water from 52° F to 149° F.



"Ramp Up Times for 10.5 gal Anvil Foundry 120v model" - Bill Burns

Lid	Ambient Temp	Gallons	Start Water Temp	Set Temp	Ramp Up Time
On	69	6.5	52	68	12 minutes
On	69	6.5	52	149	74 min
On	69	6.5	68	149	62 min
On	69	6.5	149	168	17 min 40 sec
On	69	6.5	152	168	15 min 5 sec
On	69	6.5	168	200	29 min 45 sec
On	69	5.5	67	152	54 min
On	71	8	56	60	5 min 15 sec
On	71	8	56	65	9 min 40 sec
On	71	8	56	70	14 min
On	71	8	56	72	16 min
On	71	8	56	83	25 min 15 sec
On	71	8	56	122	60 min 30 sec
On	71	8	56	149	90 min
On	71	8	56	152	94 min
On	71	8	152	189	35 min 40 sec
On	70	6.5	152	200	48 min

KETTLE SOURING

Can the Foundry be used for Kettle Souring?

YES, absolutely. In fact, it's perfect for kettle souring because you can maintain the optimum temperature all the way through. One important thing to remember is that you will want to meticulously clean and sanitize the kettle after kettle souring to ensure that any and all traces of the Lactobacillus contaminating future brews.

Generic Kettle Souring Steps

- 1. Mash in complete
- 2. Heat to a boil (for 15 minutes total) to sterilize the wort and immersion chiller
- 3. Cool wort to 95° F and adjust pH down to 4.5 pH using lactic acid
- 4. Pitch 16oz (1/2 container) of Good Belly Probiotics I used Mango but any flavor is fine as the flavor won't be imparted into the brew.
- 5. Attach the lid and clamps and cover any openings with tape, saran wrap or foil.
- 6. Set Anvil Pwr % to 40% for 120v configuration and allow to sit 24-48 hours at 95° F to 100° F (or until desired level of sourness is achieved 3.2 3.6 for Gose).
- 7. 24-48 hours later, continue your brew day.

DISTILLING

Will a Still Spirits Copper Alembic Dome Top fit on the Foundry?

No, it is a smaller diameter.

TROUBLESHOOTING

E1 Error Code

User reported that they called Anvil Tech Support and they suggested DISCONNECTING THE POWER then removing the black base of the Anvil and check the connections. There was a white ribbon cable to the control board that was not firmly set into the socket. A couple of screws got an extra quarter turn. Put it back together and should heat up without any error codes.

E3 Error Code (Run Dry Protection)

If the unit is accidentally run without water, the dry run switch will cut the power to the heaters. An error code "E3" may also appear on the display if/when the Foundry is scorched on the bottom. Scorching rarely occurs in normal brewing cycles, however, some users have reported it when performing extract brewing OR using instant grains like oats when mashing in.

If the error is caused by scorching

- 1. Turn off and unplug the Foundry
- 2. Scrape/clean the internal bottom of the Foundry.
- 3. Tip the Foundry (carefully to avoid spilling any hot wort) enough to reach under and push the reset pin back in.

Extract tip to avoid E3 Error Code: For those using the Foundry for extract brewing, be sure to turn the power to the burner off before adding the extract. Otherwise there is a VERY HIGH probability of buildup and scorching to occur which will cause an E3 error code.

^{*}The run-dry protection switch is located center bottom of the Foundry.

My fan is loud and sounds like the bearings are going bad?



On older units, these may have come from the factory tightened a little too snug. Locate the screws by the vent at the bottom of the unit, generally where the sound is coming from, and loosen them 1/4 - 1/2 a turn.

I've tried everything and my unit isn't working, how do I contact Support?

Email Anvil Support - support@anvilbrewing.com

Call Anvil Support - 765-421-2018

Message Anvil Support - through FB Messenger

GLOSSARY/TERMS



Malt Pipe/Grain Basket – the internal basket that holds the grains for Mashing on the Anvil Foundry.