

As a distiller, proper equipment selection shouldn't be the bane of your existence. My bane? Well, her name is Marie, Bain Marie to be exact. This is an often overlooked yet incredibly useful type of still that I am honestly surprised is not used more often, especially with smaller distillers such as myself. Let's start at the beginning, as all aspiring and current distillers do, with our products.

My background for making the (crazy) decision to open a distillery rests largely on my love and passion for cooking. We are all trying to make an amazing finished product and while ingredients matter hugely, so do the tools we use to transform them. You say you like steak but don't own a cast iron skillet? Shame on you! Only joking, I'll let it slide if you are using the steak for tartare. Make pizza without a pizza stone, a béarnaise sauce without a double boiler? You see where I'm going with this, specifically that last example. A Bain Mari still is just a huge double boiler. Double boilers are used for delicate sauces like béarnaise and hollandaise because there are elements in those mixtures that you really don't want to burn as it can drastically change the taste and consistency, something you can't undo once it's done.

I approached our gin in the same way I approach trying new and complicated recipes. Knowing that we wanted a true to form British style dry gin and not the more grain heavy, aromatic New American style that utilizes a less refined base and a vapor basket for distillation, we knew we wanted to have the botanicals in the kettle, which can pose issues on several fronts. The first is that those (wonderful) oils will flavor your still, especially if there is copper anywhere (which there should be, but is a subject for another conversation). So, unless you are a gin nerd and purist like me and want to make something other than gin in your still, you'll have to go another route.

The second concern that comes up is heat. This is where those cooking examples come into full force as heat management is *critical* to your final product. A good fatty ribeye demands searing heat on a cast iron skillet to get a nice crust without overcooking the center. If you like it rare just cook it 5 minutes per side on the stovetop, if you like a medium rare start with a few minutes of searing then finish in the oven for 8-10 minutes in the same pan. Cook it on the barbecue and you'll lose too much fat (and sometimes start some fantastic grease fires!) and use anything else with less heat capacity and the end result just won't be quite the same without locking in those delicious juices. Where were we again? Ah yes, heat in the still. Gin botanicals by nature are delicate, you just can't treat a fresh citrus peel like a 2-inch piece of meat. When we've got delicate ingredients, we need a delicate and manageable heat and this is where the Bain Marie really shines.

We use waste vegetable oil as the heating medium in ours, it's readily available and very inexpensive. With 6 heating elements running a total of 33,000 watts, it doesn't smoke or burn either (assuming it's been refined properly). The heat up time isn't the fastest in the world, taking about 2 hours on a cold start for our 130 gallon kettle, but the heat we receive when it's at operating temperature is soft, even, and most importantly it is consistent. Consistency is key

when dealing in small batches, it's another reason we don't grind or alter our botanicals as we couldn't guarantee that exact same grind time after time.

When you are dealing with instant heat using a steam boiler, or utilizing direct fire underneath, there are levels of unpredictability that are sometimes hard to rope in, especially on smaller stills. The larger the still, the less "shock" effect heat will have on it. This is even worse on stills using electric elements inside the kettle itself. Even the so called "low watt density" elements can be like putting a flame onto your botanicals if you are thinking of having them in the pot. This also applies to other spirits like rum and whiskey if you are distilling on grain (or sugar) as any physical matter can be susceptible to extreme heat alteration, and in a very random manner at that. Making my cuts based on the botanical oils as they come through, coupled with the column vapor temperature, our batches have been falling within tenths of a proof gallon in consistency. This all using some oil we procured from a guy on Craigslist who was making it for converted biodiesel cars.

Think of it: your local fire inspectors love that you aren't starting a bonfire underneath a kettle of high proof alcohol and you don't have to spend tens of thousands of dollars on a boiler, boiler room, steam lines etc. There is no pressure in the system to fret about, and the only drawback is a little extra time to wait while you get to enjoy the faint whiff of French fries as that oil gets warm. This is not a new technology, in fact it's been around for centuries, as have most of our spirits. Marie's been good to me, maybe someday you can meet her too.

-AJ Temple

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