

AUTUMN IS HERE and we couldn't be more excited! Transitioning from the summer heat to the crisp and cool weather of fall seems to bring a sense of order to the world. People are ready to hunker down and focus on school, work, or whatever it is that pushes us all forward. It's our last deep breath before holiday madness, so it's a great time to take care of some of those pesky maintenance issues.

This edition of High Maintenance marks the start of our third year writing for *Barista Magazine*. We are really grateful for the opportunity our friends Sarah and Ken have given us.

[Editor's note: Back atcha, guys—this column has become one of the most popular features we've ever had!] Of course, we wouldn't be able to keep this going without the support of all you readers out there, too, so here's a big ol' heartfelt thank you to everyone!

What are some dos and don'ts when it comes to using the tea tap on the espresso machine?

We have a customer who refers to the water from the espresso machine's spigot as "the dragon water," ha ha! Unfortunately for them, they have a machine that doesn't offer a cool-water mix. Generally speaking, the water from the spout should only be used for rinsing shot glasses and cleaning utensils or flushing out a dirty drip tray. The water coming from the spout is typically too hot for drinks like Americanos and tea. The water is pulled from the steam boiler, where temperatures are generally set around 124°C (255°F). Because the water is constantly boiling and extracting minerals, sometimes unpleasant flavors will show themselves in the cup, too. As I mentioned before, some machines come with an adjustable cool-water mix so you can adjust the temperature of the water coming out of the spout. It also gives you a nice steady stream rather than the crazy sputtering "dragon water." All that said, I know plenty of cafés that serve drinks using water from a mixed tap and have little to no issues. I do think in a perfect world every café would have a separate source for hot water, whether it be the spigot on your batch brewer or a dedicated

makes a little foam in the blind screen, but it really is just a preference. You do you.

-Alex

Should I have my baristas use both steam wands equally to preserve the life of the machine? They tend to favor the one on the right as most of them are right-handed.

We definitely recommend attempting evenly using things on both sides of the machine when possible. This is most important for the groupheads on your machine. Water that sits without moving in the group can cause some off flavors, amass mineral deposits, and be plagued by other issues that arise from lack of use. That said, when it comes to the steam wands, many cafés do tend to favor one wand most of the time. We find it typically ends up being the one on the opposite side of the machine from the grinders. This is usually fine. You will still want to make sure to preventively rebuild the lesser-used

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hot water dispenser. I've never had a café complain that they have too much hot water.

—Dblj

wand as the seals inside can dry out and leak from disuse as much as from overuse.

—Alex

How can I choose the right cleaning product—I think for most people, cleaning products look all the same. I like this column so much, by the way!

Well, thanks! We are having a lot of fun putting it together! To (sort of) answer your question, there are sooooo many options out there to choose from, as you know. We don't want to get into directly endorsing anything here in our column, which we try to keep as neutral territory for equipment and coffee manufacturers and the like. I will say that most cleaning products on the market do have different enough formulations of ingredients that you can definitely tell the differences between them. If you are cleaning your machine on the daily, though, just about every product we have tried works about evenly. It's when you try to clean a machine or pot that hasn't been cleaned religiously and has some caked on/baked on coffee oil and solids that certain products tend to show their stuff (or lack thereof). Your local technician or even your coffee supplier likely has a kind they prefer. You could ask them what they use, and you could also ask other shops in your area what they like and why. You could also try a few different types of cleaning products out and just continue to order the one you personally felt worked best. I prefer a cleaner that

There are all these new-fangled brewers coming onto the market. What's the fail rate and what are repairs like? This is a great question! We are constantly being introduced to new equipment in our industry and it can be really overwhelming. It is a big commitment to bring on a piece of equipment that just came to market. Most manufacturers will quietly place new gear out in the field anywhere from a few months to a few years before releasing it to the masses. Field testing equipment is critical for getting real-life feedback so adjustments can be made before officially launching. Even so, most new products will run into issues at some point, but usually the manufacturers are willing to kick in some parts and offer up support. Some of these equipment builders have been at it for a long time and have plenty of R+D under their belts, and others are literally building stuff in their garage. My advice if you're interested in a new product is: Do your research, go check stuff out at a trade show, and ask lots of questions. Consult your technician and ask if they can sell and support the product for you. That way you know you have someone close that can help you out if needed. Good luck!

—Dblj

How often should we change the water filter on our espresso machine—e.g., how much water should go through the filters, and how do we test for it?

We've all heard the statistic that coffee is 98-percent water and how filtering for flavor purposes is so important to the enjoyment and deliciousness of the final brew. But water is also a major contributing factor to damaging just about any type of equipment it's used in, from swimming pools and car engines to—yep, you guessed it—coffee equipment. The other thing to know is that water is not as simple as we sometimes think. The clear liquid supplied to you by your city, county, personal well, or wherever you get your water from is an extremely variable and tricky substance to treat, and may have a huge variety of contaminants from old dirty pipes, high or low pH levels, scale-forming minerals, dissolved solids, and chemicals like chlorine that many municipalities will use to treat it.

Filtration and softening are a couple of the first lines of defense against many chemicals that would ruin your coffee and damage your machine, like chlorine and calcium. Any time we build a system, we subject a water sample to a variety of tests for many factors like chlorine content, hardness, total dissolved solids, and quite a few more. Then we look at what a machine manufacturer may require of the water in order to keep the machine from getting damaged, as well as industry guidelines for what should be in water to make coffee extract properly. It is quite the balancing act! Then we try to build a system that

treats each specific targeted parameter and will be sized appropriately to last about six months between cartridge changes. If the system is too small, then you waste money blowing through filters and potentially having the system clog between changes. If the system is too big or poorly or infrequently maintained, you can run into other issues that happen when water sits in a dark canister without being disturbed, like algae growth, etc. You should work with your local tech or water-filtration company to test the water properly and get the system sized right and with the proper chemical balance, and your machine and coffee will thank you for it. This is definitely one to consult about with the experts to ensure that your machine stays healthy and the coffee always tastes great!

-Alex

Got a question about coffee equipment?

We'd love to help! Just email your thoughts and queries to highmaintenance@baristamagazine.com.

