

WELCOME BACK TO ANOTHER EDITION of "High Maintenance." We are super stoked to be headed back to Seattle this month for the Specialty Coffee Association's (SCA) Global Specialty Coffee Expo! It's always great to reconnect with old friends and colleagues, and hopefully make some new ones along the way. We definitely love to check out everything new in the equipment world and taste coffees from roasters and origins we may not get a chance to try anywhere else.

We hear there may be some decent parties to be found, as

well! You absolutely need to balance out all that walking and talking and coffee tasting with a little fun and relaxation, in our opinions. If you can make time to get out of the convention center and do a little sightseeing, even better. And since the Expo is in Seattle again this year, you couldn't ask for a better place to see some beautiful natural scenery and drink some amazing coffees in shops all over the city.

We hope we will see you around the show for sure—we will once again do a booth takeover at *Barista Magazine*'s booth, #2222, during the Expo, so stay tuned to *Barista Magazine*'s

Instagram account (@baristamagazine) for details! Now let's get to some down-and-dirty equipment talk, how about it?

How do you decide when it is appropriate to use a reverse osmosis system versus just a water filter?

Reverse osmosis (RO) is generally only used in areas where the water is very hard (high mineral content) and might contain other compounds that can damage equipment. A simple sediment and carbon filter will help with color, odor, and taste, and can be sufficient if the water in your area is generally soft. There is a step in between called softening, which is great if your water is somewhat hard but generally has little to none of the other harmful compounds. Water chemistry can be different not just from region to region, but even just from one part of town to another, so it's always important to know how to test water and be on the lookout for a few key elements. This is something that any technician should be able to do.

Some equipment manufacturers publish water require-

While the technician is in there, they will also inspect the valve itself for signs of wear, lubricate all the moving parts, clean out all the little ports and holes where milk and other crud gets trapped, and basically get that thing feeling—in some cases—better than brand new. I have personally found that feeling the newly rebuilt steam valve is typically the thing that baristas and shop owners are most excited about. If it has been too long since the last rebuild, it's an immediately noticable improvement.

-Alex

How does one get in to becoming a coffee technician?

It's really cool how much interest there has been about getting into our trade! You can check out the December 2017 + January 2018 issue of *Barista Magazine* to read an installment of "Pathfinder: Exploring Careers in Coffee" that's all about becoming a tech. Tom Abraham, who is a tech for Ozo Coffee in Boulder, Colo., writes a very familiar story on how he found his way into this crazy world of tech life.

In my opinion, the absolute best way to go about getting

"If one steam wand is more powerful than the other, you can usually guess that there is a clog somewhere that is restricting the flow."

ments, which is super helpful. Here are some of the general measurements a café owner might want to keep handy: Total Hardness (GPG): less than 3; Total Dissolved Solids (TDS): 70–150; Ph: 7.0; Chlorides: less than 30 ppm; Silica: less than 5 mg/l.

I know that's a lot, but hey, you asked!

-Double J

When should we change the seals on the steam wand?

We recommend you rebuild your steam valves at least twice a year. Some really busy shops could benefit from doing it more often, but I would never recommend less often than that. There are typically a lot of O-rings and seals that will dry out and crack, and you can be left with a steam wand that won't shut off. into this or any other trade is get an apprenticeship. Take the time to get to know some of your local techs, asking questions both technical and about the daily ins and outs of the job. Make your intentions clear, but don't be overly pushy. It's important to be sure it is something you truly want to do. We always look for people that will want to do this job for a long time, and not just put another notch in their coffee belt. I like to remind people that being a tech is still very much a customer-service job. The hours can be sporadic, you're going to get dirty, and your hands will look like you've been playing with a kitten (or a tiger) pretty much all the time. It's hard work, but it can be very rewarding. Good luck!

-Double J

Why is one steam wand more powerful than the other on my espresso machine?

Probably because it needs a rebuild. Basically if one wand is more powerful than the other, you can usually guess that there is a clog somewhere that is restricting the flow. It could be the tip itself. You can check it by poking the holes out with a pin, and if that weakness you were feeling in the steam wand goes away, it was likely a milk clog. Make sure your baristas are purging and wiping the wands after steaming every drink.

If that isn't it, another possibility is that there could be a clog in the tubing that leads from the boiler to the wand, or a clog in the valve itself, or a clog in the wand. A tech should be checking all of these things when performing a rebuild. You may want to let them know you're experiencing a pressure or flow difference so they can be sure to check all of the possibilities.

-Alex

My hot-water tower is sending out water that is too hot. How do I adjust the internal temp of the tower?

The short answer is, it depends on the make and model of your tower. Some towers have buttons right on the front to increase or decrease the temperature. If yours doesn't, it likely has a thermostat or digital control inside that only a qualified tech should access. Opening any piece of coffee equipment is dangerous as there are a lot of wires carrying a lot of electrical potential that, if mishandled, could damage your equipment, or worse seriously injure (or, yes, even kill) someone without proper training. Also, it should go without saying that a hot-water tower is full of—you guessed it—hot water. The water in a tower can seriously burn or scald someone, so if you don't have the type of machine that allows the end user to adjust from outside the machine, then you're definitely gonna want to call a technician.

-Alex

Got a question about coffee equipment?

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



