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host at **Schomer's
Table@Lucidcafé**



On The Table #2

Dear cyber reader, our second column focuses on some management basics that will establish great **barista Techniques** at your espresso operation. Since brewing precise espresso starts with the ability of your baristas, we'll start at the beginning: **hiring** good people, and then **training** them. We will wrap up with Espresso Machine Cleanliness.



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Hiring

In hiring a potential espresso specialist, one of the key qualities to look for is a person who displays a certain pickiness with their coffee. The best baristas are very fussy about their craft. They want it just so. To start an interview, I may make a candidate a perfect cappuccino. Do their eyes light up upon tasting it? No lights may mean no barista. Are they excited about food, wine, beer? Any sign that an applicant is connected to their taste-buds is a good sign. Some kind of culinary interest and excitement **MUST** be present.

For work experience I prefer a background in bartending.

At Vivace we always hire with a team. My trusted managers and business partner must all approve a candidate before we will take them on. Human judgment is fallible. Expand your powers of judgment by using some trusted allies to evaluate job applicants. And, as long as the "snivel rights" revolution is still going on, you protect yourself from opportunistic law suits by interviewing with a team. Never interview a candidate alone.

As a high volume business we have enough work to create an entry level position, a barback. This is a tough job which requires performing tasks such as running errands, stocking, and cleaning ashtrays, for little pay. The person who can handle the barback position shows a strong sense of priorities and a strong work ethic. If we like their performance as barback, and we see they are excited about the coffee, they are slotted for a barista position.

Hiring has been made much easier since we got big enough to create the barback position. Staff and managers can train the barback is a week while they are on the job. The new- comer has an opportunity to prove themselves before I invest a lot of time in their coffee training.



Training

The training of a barista is an ongoing process and should not be viewed as a one-time event that a new employee undertakes. Any in-depth training takes place within the context of a "company culture." Each organization will form its own way of doing things based on staff perceptions of the priorities of the owners. Thus, the priorities of the owners will either erode training goals or reinforce them.

The formation of a culture of excellence is the big difference between average coffee and superlative results.

I divide up espresso preparation into [factors](#). There are about 17 depending on how you divide them up with four broad categories: **1. Environmental Factors, 2. Equipment Factors, 3. Ingredient Factors, and 4. Techniques of the Barista.**

Anyone attempting to specialize in the making of espresso coffee needs to control each factor in order to approach perfection. Obviously, machine set-up and blend selection are not going to be taught to your new hire. You the owner need to be the Macchinesti, or (espresso) machine specialist. In an initial training we focus on category four, **Techniques of the Barista.**

After serving as a barback in our organization, an upgrade to barista is accomplished in the following manner.

I personally teach the theory of espresso preparation first. I explain and draw pictures to show how coffee volatility and the properties of pressurized water affect the espresso process. Coffee flavors are volatile and pressurized water will take the path of least resistance, rules for living.

Sit them down and give them context by which they can understand technique. If you take the time to establish this context your technical training will be retained longer by the trainee.

After a 20-minute theory discussion, we go to the machines. I break down shot making for the trainee into the following categories:

1. **Dosing, distribution and packing.** We do this until they get it. Grinding a shot, evenly distributing it, then dosing and packing it perfectly over and over until they have it in their minds and in their hands. It may take five minutes or an hour, depending greatly on the physical talents of the trainee.

2. **Adjusting the grind for a 25-second pour.** I show them how to adjust the grind, holding packing weight and dosage constant, to change the rate of water flow through the packed coffee.
3. **Cleaning techniques are covered next.** Scrubbing the porta-filter every 40 minutes, rinsing dirty water from the heads after each shot you make, and backflushing between groups of customers. We also cover cleaning with espresso detergent during this phase of training.
4. **Thermal Control - Temperature Surfing.** I teach them to be quick, not allowing the porta-filter to cool off while packing, and manipulating the temperature of the head with 2-ounce pulses of brewing water to achieve a target temperature.

This is the content of my initial training program and can be accomplished with most students within four hours. It is important to note that my best baristas are never my quickest students at first. This probably is just a statistical anomaly, but intriguing just the same. Maybe the ones who respect the coffee are cautious and fumbly at first.

I never teach milk to a new trainee, and all my baristas work in teams. A new barista works the shot making side of the machine, while the other steams milk and runs the cash register and supervises the newcomer's coffee for a few weeks. When I see that they are getting a feel for the coffee we go into milk, details of the cuisine, etc.. It usually takes about 4 weeks for a barista to be allowed to solo on a bar while their partner takes a break or does dishes.

In my first two years of business before my company culture formed, training was much slower. Now information is reinforced from all sides as the newcomer makes his or her way into the staff. Also, there is a healthy attitude of competition among staff to excel.



Espresso Machine Cleanliness: Next to Godliness

Extracted coffee oils can build up on all surfaces that come into contact with the liquid coffee. These deposited oils quickly become bitter due to the chemical instability of the flavor compounds. When your fresh espresso comes into contact with these old deposited coffee oils the result is a rancid bite in the final cup.

The bad news is that dirty equipment is very common at many espresso making establishments in the States. The good news, however, is that there is a simple solution to the problem - diligence.

An espresso maker must regard his or her porta-filter, (literally "portable filter") and group head much as a great chef would regard his or her sauce pan. It must be clean, yes, but it also must be seasoned

with coffee oils so that the liquid espresso does not come into contact with the bare metal. For this reason, it is essential that after cleaning the handle or backflushing with espresso detergent, a seasoning shot be made and discarded to prepare the metal surfaces for coffee making.

A. Porta-Filters



Remove the coffee baskets and soak your porta-filters overnight in a solution of hot water with one tablespoon of espresso detergent dissolved in it. In the morning, scrub vigorously with a Scotch Brite green scrubbing pad, the kind that scratches glass. Get a tiny bottle brush to reach hidden crusties in the tiny apertures on the spouts.

When soaking, do not submerge the plastic portion of the handle because over time it will be damaged by the detergent.

It will be necessary to develop a regular habit of soaking your porta-filters every night. In this way it is easy to keep coffee oils from accumulating. If allowed to collect, coffee oil deposits can be quite difficult to dislodge from interior spouts.

While preparing espresso pop the coffee baskets out of the porta-filters each hour and scrub out the interior with a scotch brite pad. Rinser the porta filter after a quick scrub under the hot water jet from the steam boiler. This strips away oily deposits, loosened by your scrubbing, and adds heat to the metal porta-filter. Heat should always be conserved in the porta-filter while working the espresso machine.

When the porta-filters are dirty, the appearance of the espresso will change along with the flavor. The crema will not look quite as luxurious as it oozes out of the spout. It becomes a bit thinner and ragged looking and may feature whitish stripes in with the red brown flavor oils.

B. Backflushing with Espresso Detergent

Backflushing an espresso machine means replacing your coffee basket in the handle with a blind filter, a device that looks like a coffee basket but has no holes in the bottom. The blind filter serves to build up pump pressure against it which is then released in a flushing action out the drain located behind the group head.

All modern espresso machines feature a valve and drain network to release pressurized brewing water. Otherwise, after a shot has been

made hot water and spent coffee grounds would spray all over the place when the handle is removed to make the next shot. You must have a valve to release the built up pressure. This valve and drain network, located just inside the group head, is a great place to build up rancid coffee oils.

Espresso detergents have been developed to liquefy and remove coffee oil deposits within the group head. The active ingredient in the detergent is trisodium phosphate (TSP). But espresso machine cleaners are buffered with foaming agents and compounds to prevent TSP from attacking gaskets and softer materials within the group. They are expensive but necessary to clean and preserve the integrity of internal valves and gaskets.

As a minimum machine cleaning schedule, backflush with espresso detergent each evening as you close up for the day. Follow the instructions on the detergent as dictated for your type of machine.

At Vivace, we use a teaspoon of espresso detergent placed in the blind filter. Secure the group handle into place in the head and activate the pump for 30 seconds. Release pressure and repeat twice for three or four-second intervals. This is the wash cycle.

After washing, it is essential to rinse the soap out of the group head before serving. Remove the blind filter and rinse it under hot water. Then run short bursts of brewing water through the head of the machine until it is clear. Put the clean blind filter back into the group. Then energize the pump for about five seconds and release, repeating this step five times. Backflushing with clear water at least five times is essential to achieve an effective rinsing.

You may find it necessary to clean the machines with detergent during the day. Taste the coffee frequently to create your own cleaning schedule. At Vivace, we clean machines after every four hours of service.

C. Group Head and Dispersal Screens

Remove dispersal screens, the screens between the porta-filters and the group head, nightly and clean them. Clean the group head under the screen by scrubbing with your Scotch Brite pad nightly as well.

D. Group Gaskets

Clean the group head gaskets with a small stiff brush when you have the screens out. (Many machine manufacturers and reps have special brushes for this task in inventory.) These gaskets are the ones that the porta-filter snugs up against when the group handle is put into place, creating a sealed environment to contain pressurized brewing water.

E. Steamer Tips



On a nightly basis, remove steamer tips and clean apertures with a pin or brush. It may be beneficial to run a small brush up the wand as well. Many technicians recommend submerging the steamers in water overnight to soak off crusties. The problem with this is that if the power goes off in the building the boilers cool off. The cruddy water is then sucked up the steamer wand and into your main boiler. Not a pretty picture.

These procedures, if performed by your closing crew each night, will not only help keep the coffee sweet, they also will increase the longevity and reliability of your espresso machine. Coupled with good water filtration and periodic maintenance check-ups by a factory-trained technician, good cleaning habits should allow your commercial espresso machine to last indefinitely.



Old Italian Folk Remedies

A technician that I know has had good luck stripping scale build and rancid milk from inside espresso boilers and delivery lines by flushing the machine with mild lemon juice.

In this case he used one quart of lemon juice to five gallons of water. He rigged the machine up on a bench to re-circulate the mixture for two weeks. (Obviously the machine was out of service at this time.) He reported to me that the boiler interiors looked brand new after this treatment. If it works, it sure beats replacing your espresso machine due to excessive scale build up. If you try it, write to me and let me know how it worked.

END

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