

General Home Roasting Observations for **FreshRoast + 8 Roasters** from *Sweet Maria's*

Home coffee roasting is as easy as you want to make it, or as exacting and technical as you care to be. Pay attention to the process, especially toward the end of the roast where the coffee rapidly reaches the palatable roast stages: City (medium), Full City, Vienna, French (dark). The FreshRoast reaches these stages fast!

- Coffee roasting produces a wonderful fragrance, unobtrusive with lighter roasts but smokier if you roast dark. Operating any type of stove hood fan helps if the smoke is too intense for you. You can roast on a porch or near a partially open window weather permitting. But be aware that cold ambient temperatures might dramatically effect the roast, and could make the roast stall completely.
- Roasting produces chaff. Chaff is a fine skin that detaches from the bean as your roast is agitated. Your roaster takes care of chaff, but if you are careless, you may have to do some sweeping. Empty the chaff collector between every roast and brush it out to get perfectly consistent results.
- Never leave the room while you are roasting coffee, even though the roaster is automated. The difference between a dark roast and a fire is not as much as you think!
- Built-up coffee oils in the roaster are of no real consequence until they impede visibility or become a fire hazard. (In fact, a professional drum roaster requires hours of roasting initially to properly “season” the drum.) Do not clean your roaster too often... but do remove all the chaff from the top between every roast and soak the top to remove excessive oils when visible.
- Batch size is critical in any roast process: if the amount of coffee you put into the roaster varies, the roast will vary too. Smaller batches take longer to roast, larger batches can roast faster (opposite of what you might think...) Ideally, it is best to roast by weight, not volume. But following the instructions for batch size by volume works just fine : the ideal FreshRoast batch size is 2 rounded 43 cc scoops which equals .14 Lb.. or 2.25 ounces or 64 grams.
- The FreshRoast instructions are adequate. Read them. This “tip sheet” is not meant to replace their instructions.
- In my tests a setting of “6” produces a City (medium) Roast, and “6.5” produces a City+, “7” is Full City (dark-medium) roast. “7.5” is a Vienna or Continental roast, “8” is a French Roast. I also turn the dial all the way clockwise, then back to the setting I want. 7 minutes is a good starting point, but be aware that dry-process coffee, which has more chaff, raises the heat of the roaster and takes as much as 1 minute less to roast! Decaf can roast faster. BTW “espresso” is not a specific degree of roast. I prefer blends for espresso at 7 on the FreshRoast and allowed to rest 48 hours in an airtight mason jar. Roast times are dependent on your line voltage and ambient temp, so you will need to experiment to establish the exact roast settings that work for you. Changing to a different circuit or a colder day outdoors can effect roast times too. Also, consecutive roasts without letting the roaster cool to room temperature will speed up and/or make roasts turn out a bit darker (and will shorten the life of the roaster over time).
- No home roaster is designed to roast continuously! Wait for the machine to cool before doing another batch
- I prefer to dump the coffee into a stainless mesh colander after the cooling cycle completes, just to get the coffee away from the warm metal/glass surfaces. When the coffee is room temp. I transfer it to canning jars. Coffee is better after 12 hours of “resting”, which allows the CO2 to de-gas from the coffee. It is at its flavor peak at 12-72 hours. When you open the jar, you will know what I mean!
- Fresh Beans has a manufacturer's warranty and Registration Form is available at www.freshbeansinc.com. Call them directly at 435-940-1616 or 888-757-2326 if you ever have a mechanical problem with the roaster
- You will find photos,roast examples of the various coffee stages, and further tips on our online Freshroast Tip Sheet at: <http://www.sweetmarias.com>

In a nutshell, here is the roasting process you will be observing:

- For the first minute the bean remains greenish, then turn lighter and emit a grassy smell. The beans start to steam as their internal water content dissipates.
- The steam becomes fragrant. Soon you will hear the "first crack," an audible cracking sound as the real roasting starts to occur: sugars begin to caramelize, bound-up water escapes, the structure of the bean breaks down and oils migrate from their little pockets outward.
- After the first crack, the roast can be considered complete any time according to your taste. The cracking is an audible cue, and, along with sight and smell, tells you what stage the roast is at.
- Caramelization continues, oils migrate, and the bean expands in size as the roast becomes dark.
- At this point a "second crack" can be heard, like a snapping. Small pieces of the bean are sometimes blown away!
- As the roast becomes very dark, the smoke is more pungent (oils burn against the hot surfaces of the roast chamber) as sugars burn completely, and the bean structure breaks down more and more.
- Eventually, the sugars burn completely, and the roast will only result in thin-bodied cup of "charcoal water."