

General Home Roasting Observations for **FreshRoast SR300 and SR 500** 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 but be aware that cold ambient temperatures can 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. Brush the chaff collector out between every roast and soak it from time to time to remove built-up coffee oils.
- 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 chamber are of no real consequence until they impede visibility or become a fire hazard.
- Batch size is critical in any roast process. In the Fresh Roast, smaller batches take longer to roast, larger batches can roast faster (opposite of what you might think) because a larger volume of beans blocks more hot air. We have found that the less you use, the more even the roast – about 1/3 cup in a standard cup measure. Fresh Roast suggests using four (4) of the provided scoops, but our results were better using less, about 90 grams.
- The FreshRoast instructions are adequate. Read them. This “tip sheet” is not meant to replace their instructions.
- On the SR300, you have no control over heat or fan setting, only time. The timer is preset to 5.9 minutes. On the SR500, for a nice slow warm up we use the fan on HIGH and heat on low. (The manual suggests a MEDIUM fan speed and high heat – but we get better results with our method.) In our tests using 1/3 cup of green coffee, we get first crack about 3 minutes into the roast, a City + roast about 5 minutes into the roast, and second crack (Full City/Full City +) about 7 minutes in. The timer counts down so you will have to figure roast times backwards. The time is less important than watching and listening for cracks – so don't worry over much about the time. Dry-process coffee, which has more chaff, raises the heat of the roaster and takes as much as 1 minute less to roast!. Roast times are dependent on your line voltage, so you will need to experiment to establish the exact roast settings that work for you. Changing to a different plug on a different circuit 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. Roasting in a cool ambient temperature or using an extension cord also affects the roast. IF THIS IS TOO DARK - the first thing to do is to stop the roast earlier and on the SR500 increase the fan speed. IF THIS IS NOT DARK ENOUGH - first try roasting longer, and then try using more coffee.
- For the most even roast, on either the SR300 or SR500, there are three techniques to try: 1) Switch to cool one minute into the roaster and then switch the roaster back on and re-start the roast. 2) Take the top off the roaster and stir the coffee, then replace the chaff collector once the beans start moving on their own. Another trick is to take the chamber off the roaster and shake the beans during the roast. Be careful though – the pieces can be hot. More details are on this page [http://www.sweetmarias.com/freshroast\\_detail.php](http://www.sweetmarias.com/freshroast_detail.php) You don't absolutely need to do this, but you will get a more even roast that means the beans taste as they should.
- I prefer to dump the coffee into a stainless mesh colander after the cooling cycle completes, 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 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](http://www.freshbeansinc.com). Call them directly at 805-601-7731 if you ever have a mechanical problem with the roaster

**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 snapping. As the roast becomes very dark, the smoke is more pungent as sugars burn completely, and the bean structure breaks down more and more. Eventually, the sugars burn, and the roast will result in thin-bodied cup of "charcoal water."