

General Home Roasting Observations for **Behmor 1600 Roaster** from *Sweet Maria's*

Read your owners manual for the Behmor before using. This is a supplemental “tip sheet” only. For more info on using the Behmor go to <http://www.sweetmarias.com/prod.behmor.shtml>. **Be safe! Never leave the room while you are roasting coffee, even though the roaster is automated.** Make sure the machine is on a level surface.

- One of the main advantages of the Behmor is the smoke suppression technology employed to allow large batches (up to 1 pound) to be roasted with little smoke. However, operating the unit in a well ventilated area is still a good idea, especially if you plan to roast to Vienna or darker. If you take a roast into second crack for more than 10 seconds you will see lots of smoke. The bigger the batch, the more smoke you see.
- Roasting produces chaff. Chaff is a fine skin that detaches from the bean as your roast is agitated. Empty the chaff tray between every roast and vacuum out the inside of the roaster. Every few roasts, you must perform a “self-cleaning” cycle by inserting the empty drum and chaff tray and pushing the ½ pound and Start buttons. **PLEASE NOTE:** Dry processed coffees have more chaff and so you will need to watch the roast carefully and pay extra attention to removing chaff after the roast. Some Brazil DP coffees have shown to present a greater danger of a chaff fire on a dark roast - so be especially careful! You may want to have a fire extinguisher or water nearby in case of a chaff fire. If you see a fire inside the roaster NEVER OPEN the door. See the manual for more safety precautions.
- Built-up coffee oils in the roaster are of no real consequence until they build up to 1/16”. But you are going to need to clean the viewing glass (every 3-4 roasts, it seems) and the internal sensor (see Behmor.com website for more information). Do not use any type of metal or oven cleaners, use only mild degreasing soap and water .
- We have found the Behmor is very sensitive to changes in the WEIGHT of the green coffee in a batch. You must weigh the coffee, and be consistent! 4 oz., 8 oz., and 16 oz. are the three recommended batch sizes. If you are not getting roasts dark enough to your taste, you can reduce the batch size to 3, 6, or 14 oz, and effectively shift the entire roast range toward a darker roast. Whatever you chose, be consistent with batch size.
- The Behmor will consistently produce the same degree of roast at the same settings when it does its first roast of the day (or is absolutely cold). We recommend that you monitor the end of every roast, adding additional time if necessary and hitting the cool button to end the roast when doing subsequent batches. This allows you to target the exact degree of roast that you want, although it is less convenient than relying on the automated presets.
- We recommend that you start with a ½ batch on the default “P1” profile “A” time program setting to get started, stay close to monitor the progression of the roast, and add or subtract time if desired. From our experience every roaster will behave slightly differently due to differences in line voltage and ambient temperature. Check the Behmor manual for information on using the preset roast profiles and time programs.
- I have found the Behmor cooling cycle to be fairly effective, so let it do its job, and transfer the coffee to storage when it is room temperature. Coffee is better after 4-24 hours of “resting”, which allows the CO2 to de-gas from the coffee. It is at its flavor peak at 12-72 hours.
- The Behmor requires routine maintenance to keep it working properly. Check our site and [www.behmor.com](http://www.behmor.com)

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

- At first 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
- As the roaster moves into the third leg 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. Taste of the resulting roast is the most important thing. Caramelization continues, oils migrate, and the bean expands in size.
- If you have added the maximum time allowed or lessened the batch size you might reach "second crack", often more volatile than the first. Small pieces of the bean are sometimes blown away like shrapnel! Use the PLUS button to add time to the roast during the final roast stage (the roaster LED flashes to let you know it is almost done).
- 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."
- Behmor provides a limited 1 Year warranty (via Behmor Inc.) on the roaster; they handle all repairs and replacements directly. Our email order confirmation provides proof of purchase. Call them directly (775) 833-3363, visit their website at [www.behmor.com](http://www.behmor.com), or e-mail them at [RMA@behmor.com](mailto:RMA@behmor.com) if you ever have a mechanical defect problem with the roaster. And READ their important, well-written instruction book!!! Behmor posts updates to the manual periodically on their website. Email us if you have roasting questions ([info@sweetmarias.com](mailto:info@sweetmarias.com)).

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home coffee roasting

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## **Before Using the Behmor for the First Time – Read and Follow these Instructions!**

### **Quick Start Guide for System Check and Preparation (from Behmor materials)**

The following procedure requires approximately 20 minutes to complete. During this time please read the entire manual to better understand the Behmor 1600 functions, our user tips and key maintenance. We guarantee using the roaster will be much easier and more enjoyable doing so.

#### **System Check:**

To insure all functions are working properly press each button within each group in the following order: Press all Weight buttons starting with ¼, ½, to 1 noting time in the display changes. Next, Profiles starting with P1 through P5, noting changes on the display. Next, Programs A through D, again noting display changes. Next press, each (+ then -) Increments, Light, Cool, then lastly OFF. Start will be tested in the next step. \*\* Failure to follow the order as indicated, will possibly lead to the false appearance of buttons C and D not functioning. These buttons are designed to not function in certain instances as discussed in Part V Paragraph 6 of the manual.

#### **Preparing the Behmor 1600 for Use:**

Before first use, clean the interior of the roasting chamber with a moist cloth. At the same time check the cylinder, oven chamber and all areas of the chaff tray for stray packing material. This would include removing the brush located in the cylinder.

Place the cylinder (drum) into the roasting chamber by inserting the right end ( #1 square peg ) into the motor drive while laying the left end ( #2 round peg w/groove ) onto the holder ( # 3 ) so the groove sits in the notch of the holder. You may find the square peg might require slight rotation of the cylinder for it to slide fully into place. You'll know it is place when the left (round) side's groove drops into the holder's cut away. Always double-check to insure the cylinder is properly in place.

Install the chaff tray by gently pulling the handle back then slide it into the roasting chamber until it will go no further, then release the handle. Improper placement of the tray can prevent the cylinder from rotating properly or causing the cylinder to jam. **The chaff tray has a thin plastic film on the metal – remove this before using!**

Close the roaster door ensuring the door is closed tightly. Press any weight button, and start.

This procedure, also referred to as a dry burn, is necessary to help eliminate any residue left in the roaster during the manufacturing process while also serving to “season” the roaster and door gasket. During the first few roasts you may see some very faint smoke from the exhaust or gasket area but this should cease as the system self cleans, seasons and fine-tunes itself. This same procedure is used for periodic system self-cleaning coupled with Simple Green, as described in the Tips and Maintenance section of the Manual

Both the Sweet Maria's website and the Behmor website have more information sheets and regularly updated maintenance information. Be sure to check them out: [www.sweetmarias.com/prod.behmor.php](http://www.sweetmarias.com/prod.behmor.php) and [www.behmor.com/manual](http://www.behmor.com/manual)