

Jeff's FreshRoast Process

LIBERTY
CITY ROASTERS



Background and Overview

After a decade of home roasting, I started a roastery. Now we bring "cups of joy" to people and have over 12,000 pounds of green beans in stock.

We sell green beans to you with a big discount, to give back to the community.

Visit us at libertycityroasters.com.

We were asked to **share our process for sample roasting** and cupping.

The SR500 is our sample roaster!

Small Batch Sizes are Key!

Use Small Batch Sizes!

- **90 grams Max! (100 for Brazilians)**
- High density beans at 80-85 grams
- Beans Must MOVE at Start of Roast!
- If you have to Stir the batch is too big!

COOL SEPARATELY IF YOU CAN!

- **At end of roast, Cool beans FAST as you can!**
- Try a shop vac, bucket and colander.
- **If you cool separately, you can do back-to-back roasts!**
- **Always use cool mode after last roast** to preserve electronics.

Quick Rules that serve us well:

- **Roast for 4 Min after the Start of 1C** (disregard early outliers).
- Our SR500 is **430F on Low Heat & 450F on Med**. Yours May be Different!
- You only KNOW if a bean is high density when takes too long to hit 1C (over 6 min).
- Use a separate timer (Taylor's \$5 model).
- We Roast Indoors with no extension cord and a 20 amp outlet, to remove variables.
- It's OK to keep lid off until chaff starts to fly (1-2 min) - helps beans to dry evenly.

Sample Roasting

Since the Fresh Roast is our sample roaster, we need a consistent process, so our batch sizes may be slightly smaller than yours.

We roast samples 3-4 ways (4 if needed).

For most beans, we use this process:

- 80 Gram batches. Yes, it's small but some high density beans won't loft properly with more.
- Set SR500 for 9.9 min
- Set SR500 for **Low Heat** and **High Fan**.
- Start and pre-heat for 20-30 sec
 - 1st roast only, if back-to-back roasts.
- Charge beans (load beans into roaster)
- After 90-120 sec, max time to 9.9.
- Turn on LCD Desk lamp and aim at roaster, so you can really see the beans.



Our Process

Pre-Roast	Start of Roast	Early Roast	Start of 1st Crack
<ul style="list-style-type: none"> • Set Time to 9.9 • Set Fan to High • Low Heat (430 F) • 80 gram batch • Pre-Heat for 20-30 sec (1st batch only if multiple roasts) • Aim lamp at roaster • Use timer • Setup Roast Notes 	<ul style="list-style-type: none"> • Start Roaster • Charge beans (load beans into hopper) • Start Timer • Install top / chaff collector • Run for 90 - 120 sec • Max time back to 9.9 min (allows longer roast times) • Record Notes 	<ul style="list-style-type: none"> • At 2.5 - 3", if beans are moving "too fast", reduce fan to 75% (3pm). • If beans are STILL moving "too fast", reduce fan to 50% <p style="text-align: center;">Do NOT reduce fan below 50%</p> <p><i>If Fan is too low, beans take in too much heat late in the roast. This results in bitter or undesirable flavors!</i></p>	<ul style="list-style-type: none"> • Ignore Early Outliers (early pops) • At before 1C, reduce fan to 75% • 1C should start between 4'15" - 5'30" for Most Beans <ul style="list-style-type: none"> • Earlier for low density beans (Brazilians) • Note Time! The start of 1C is Key! • 1C is often pretty quiet with small batch sizes. If you DO know end of 1C, great - use it later. Otherwise assume 1C is 2 -2.5 min long. <hr/> <p>If 1C takes longer than 5'30"</p> <p>The Bean may be high density</p> <p style="text-align: center;">OR</p> <ul style="list-style-type: none"> • Low Heat isn't ~ 430F (various reasons) • IF this happens, you may need to use Med Heat, Roast indoors, get rid of extension cord, etc
<p>Oh no! It's 5:45 and 1C hasn't started!</p> <ol style="list-style-type: none"> 1. Don't Panic 2. Set Heat to Med 3. Leave fan at 75% and see what happens 		<p>OMG! It's 6:15-6:30 and 1C still hasn't started!</p> <ul style="list-style-type: none"> - Redo roast using Med Heat - If this doesn't fix it, your roaster has a problem 	

After 1st Crack	Roast #1	Roast #2	Roast #3
<ul style="list-style-type: none"> • If beans are REALLY MOVING, reduce fan • Do Not Reduce Fan below 50% 	<p>Drop 4 min after 1C starts</p> <p>ROAST LEVEL: Medium, City +</p> <hr/> <ul style="list-style-type: none"> • Drop @ 3.5' if low density (Brazilian) • Drop @ 3.5' for a City Roast 	<p>Drop 30 sec later than roast 1</p> <hr/> <p>Roast Level</p> <ul style="list-style-type: none"> • City + 	<p>Drop 30 sec later than roast 2</p> <hr/> <p>Roast Level</p> <ul style="list-style-type: none"> • City + • Full-City (if 2C starts)
<p>AT END OF ROAST: COOL BEANS AS FAST AS POSSIBLE!</p>			

How we Sample / Cup

SAMPLE BLIND!

Never know what you are trying or how it was roasted.

- Samples are randomized / labeled by someone who isn't tasting.
- Samples are numbered
- Roast notes for each are kept in the roast log.
- Keep folded roast notes with each sample

We are often surprised to find what coffees we actually love

- Highly rated beans can be nasty
- Commercial beans can be amazing

Most coffees to shine at City or some degree of City+.

Others are very adaptable and handle many roasts: City to Full City (start of 2C).

We rarely roast samples beyond Full City (past 2nd crack). IMO, this isn't worthwhile, unless the bean can really handle it and bring more to the table.

A darker roast can be good for very dense beans like our Sulawesi or El Salvador Bourbon, to highlight the deep rich caramel and brown / raw sugar tones.

We select beans that pass 2 Tastings

Thank you for reading!

We hope this has been useful!

ROAST NOTES

- Always record roast notes.
- It is key to **track Start of 1st Crack**, after early outliers
- Record "drop" or "final" as **End of Roast - Not including Cooling.**

: _____				: _____				: _____			
Vendor	Bean			Vendor	Bean			Vendor	Bean		
Roast #				Roast #				Roast #			
Temp	Low? / Med?	fan: High	+2"	Temp	Low? / Med?	fan: High	+2"	Temp	Low? / Med?	fan: High	+2"
1C1	___'___"			1C1	___'___"			1C1	___'___"		
1C2	___'___"			1C2	___'___"			1C2	___'___"		
2C1	___'___"			2C1	___'___"			2C1	___'___"		
75%	___'___"			75%	___'___"			75%	___'___"		
50%	___'___"			50%	___'___"			50%	___'___"		
40%	___'___"			40%	___'___"			40%	___'___"		
25%	___'___"			25%	___'___"			25%	___'___"		
0%	___'___"			0%	___'___"			0%	___'___"		
Final	___'___"			Final	___'___"			Final	___'___"		



- please roast us with love!