



## **Coffee Shop & Small Batch Roaster - 41 Great Western Road, Dorchester. DT1 1UF**

All the beans we serve are roasted in house, by hand. “In house” meaning we use our small batch 1kg Gene Café roaster. “By hand” meaning by observing the beans as they roast and adjusting the temperature/roast duration to generate an end roast objective.

### **The Gene Cafe CBR1200 - Roast Profile**

It will take approximately 15 minutes to roast one of our current house coffees, the Mexico Finca Muxbal. There are two important temperature measures we look at during the roast. The first temperature measure is the “**pre-temp**” electronic indicator which is easily observable on the front of the roaster and measures the temperature of the heat entering the roasting chamber. The second temperature measure is the “**chamber temperature**”, an analogue probe which measures the actual temperature within the chamber where the beans are roasted. The chamber temperature is the most important temperature measure, and the measure which is discussed below.

### **Initial Phase - 0 minutes – 10 minutes**

Initially we pre-heat the roaster to 230 degrees then drop the green (unroasted) coffee beans into the chamber. The chamber temperature will drop to around 150 degrees as the cool beans decrease the overall temperature of the chamber. During the initial phase, we are simply heating the beans from the drop temperature to 200 degrees. At around 200 degrees, the 15% moisture within the beans heats up to a point where it attempts to escape as a gas from the bean, changing its structure. At around 205 degrees, this sounds like twigs cracking, and is known as “first crack”.

### **Start of Rolling Crack – From around 10-12 minutes**

Depending upon the ambient temperature, the very first crack (the first of the beans to crack) to a rolling crack (where many beans start to crack) will occur between 10-12 minutes.

### **Rolling First Crack Phase - From 11 minutes - 15 minutes**

This is the delicate and important phase. During the initial phase, we have given the beans high temperatures to heat them up. At first and past crack, we want to slightly reduce the temperature we give the beans otherwise they will overheat and burn. The objective now is to extend the rolling crack duration without letting the chamber temperature drop. We have already reached 205 degrees which starts the first crack. The chamber temperature will have now risen to about 210 degrees to get into a rolling first crack. Now we want to turn the roaster burners “off” and “on” so that the chamber temperature slows down (this is hand roasting!) – ideally staying at around 210-215 (without falling back). We do not want the chamber temperature to go any higher than about 215/220 degrees, otherwise the beans will be roasting too fast and the end result will be a darker roast. At around 15 minutes (depending upon the ambient temperature), the roast should be complete.

## **The Cooling Phase**

Once the roast is complete, the beans are extracted from the chamber. A large cooling fan then cools the beans very quickly to stop the roasting process as soon as possible. The Gene Café roaster can conduct back to back roasting, so while the first 1kg is cooling we can insert another batch into the roaster.

## **Roasting in a Wok**

Green beans can be roasted in a Wok quite successfully – this is how we started a few years ago! And assuming you buy good quality green beans, you will be able to get roasted beans which taste much better than you can buy in a supermarket. Key things to remember when roasting in a wok

1. Extractor fan on, windows open (depending upon effectiveness of extractor fan!), away from smoke detectors.
2. Heat the wok up to a hot but not smoking temperature
3. Place the green bean into the wok and keep them turning ALL THE TIME using a wooden spoon
4. The beans will undergo the same experience as being roasted in the Gene Café roaster – that is they will heat up slowly – then at some stage the water inside the beans will want to boil away. The beans will require less heat, so the heat below the wok needs to be turned down somewhat so the heat you are giving the wok is less, but so that the bean temperature doesn't drop.
5. If the beans look like they might overheat at any stage, a good technique is to take the wok away from the heat momentary, keep stirring the beans until you can return the wok to the same/slightly lower heat. Sometimes removing the wok from the heat for just 5-10 seconds is sufficient to reduce any possible overheating.
6. You will see chaff in the wok as the beans roast and deposit chaff.
7. Once the beans are roasted to the level you desire, empty the beans onto a flat tray, laying them out as one layer until they cool.
8. Once cool, take the tray outside and blow on the tray to remove the chaff. Emptying the beans from one colander to another whilst blowing is also effective.
9. Your beans may not have a particularly even roast, but they will most likely taste better than anything you can buy in a supermarket.
10. Leave for five days then consume.

## **Roasting using the CBR101**

After roasting on a wok, and prior to buying our 1kg CBR1200 roaster, we bought the original Gene Café CBR101, a ¼ kilo roaster. This is a great entry level roaster and will cost about £375. It will enable you to enjoy even roasts and also the roaster collects the chaff for you in the process.

## **Green and Roasted Coffee**

We currently sell green “unroasted” Finca Muxbal coffee for £3.00 per 125g (equivalent to £24 per kilo) if you wish to try roasting at home. We also sell roasted Finca Muxbal coffee for £3.50 per 125g (equivalent to £28 per kilo). There are also a number of websites where you can buy green and roasted coffee of a much higher quality than any of the supermarkets ... Happy Roasting!