Roasting Foundation

1. Two of the most common types of of heat transfer in a drum roaster are _____

and _____.

2. _____ and _____ are released from the beans during second crack.

3. Roasting to a lighter roast color is a way to maximize _____.

4. In darker roasts, _____ can double.

5. A “bready” character in a coffee can be caused by roasting _____ at

_____ a temperature.

6. List three things necessary for a fire and if removed, would extinguish one?

a. _____

b. _____

c. _____

7. Evaluate this statement: Commodity coffee can be flash-roasted in under 60 seconds. True or false?

8. _____ _____ can cause temperature increases to accelerate near

first and second crack.

9. Using the roast profile on page 5, calculate the development time of the batch.

_____

10. What are three types of burners most commonly used in drum roasters?

a. _____

b. _____

c. _____

11. To be considered *specialty grade*, green coffee must have a moisture between

_____ and _____.

12. Fill in the missing information for the equation to calculate the Temperature Midway Point:

$$\frac{\text{\_\_\_\_\_}}{2} + \text{Temp1st} = \text{TMP}$$

On Figure A below, label points A through F using the following terms:

Color change from green to yellow
Second rack
First crack
Charge
End of roasting
Turning point

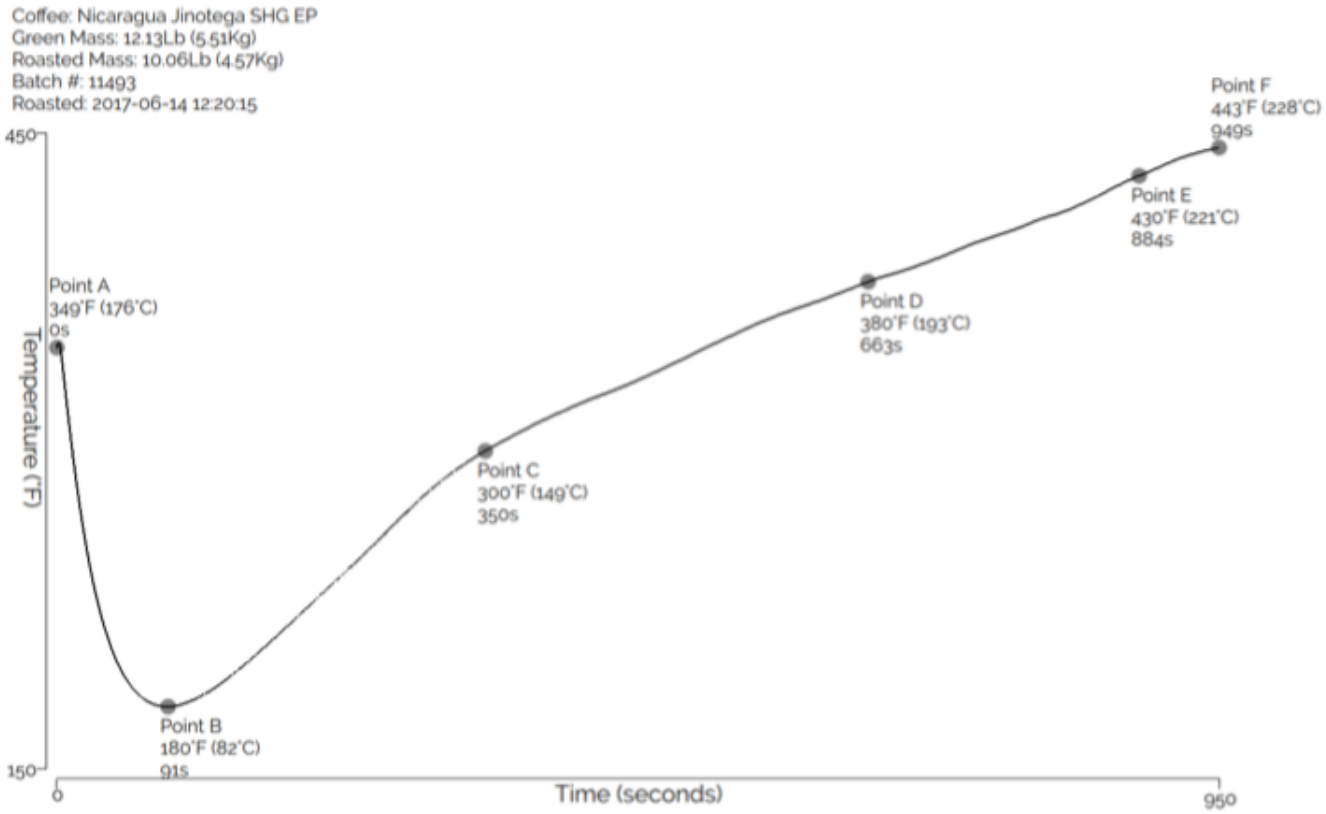

Figure A

Know the basic parts of a typical drum roaster, as illustrated in Figure B below:

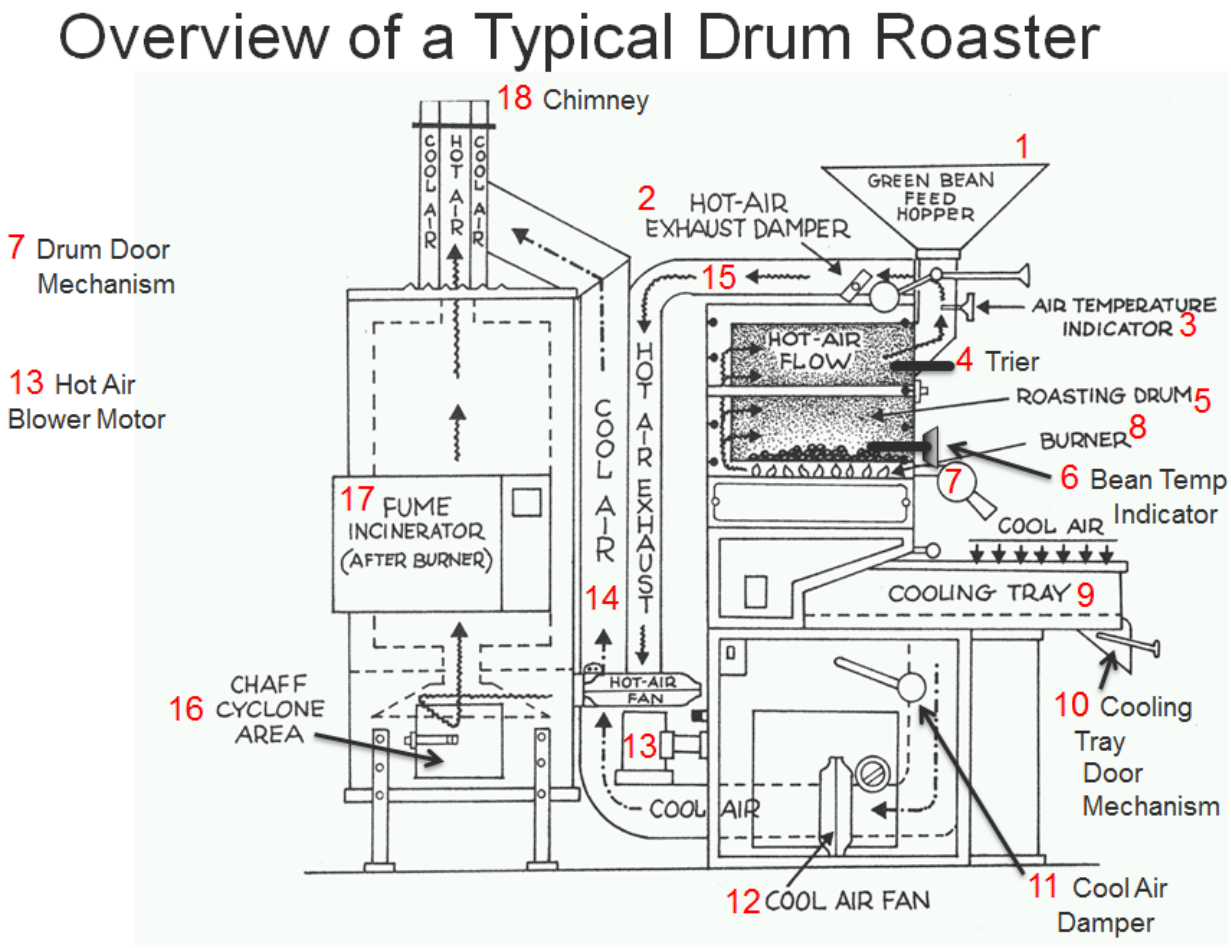

Figure B

Keywords

1st and 2nd crack.
Moisture in green beans
Air (drum environment) temperature probe
Airflow, chimney
Bean temperature probe
Chaff. Chaff collector
Charge temperature
Charge weight
End weight
Cooling phase / cooling time
Cooling tray
Dark roast high bitterness low in acidity. Opposite relationship for light roasts
Drum
Fluid Bed
Convection
Conduction
Endothermic
Exothermic
Maillard
Caramelization
Drying phase
End temperature
Fire extinguisher (water vs. CO2)
Fire in the chimney
Fire in the drum
Light, medium and dark roast
Quenching
Heat reduction points
Roast degree / roast color
Roast volume increase
Roast profile recording (time x temp)
Roasting curve
Roasting cycle
Sample spoon / trier
Silver skin = chaff
Specialty vs commodity roasting
Stirring device/agitator/cooling bin
Temperature Midway Point
Turning point
Ventilation