



## **Swiss Water Decaffeinated Coffee Co. Inc.**

### **Roasting SWISS WATER® Process Decaf – Steps to Success**

#### **Cupping:**

The fundamental practice of cupping coffees and pulling shots of espresso will always be the final arbiter in deciding the best roast profile and/or methodology. Let the coffee itself tell you what roast is best for it.

#### **Full Batches:**

Roasting full batches, or as close to full as possible, will reduce potential tipping, scorching and uneven bean development as SWISS WATER® Process decaf beans tend to be more sensitive to heat than regular beans.

#### **Time of Day – Impact on the Roast**

We suggest roasting SWISS WATER® Process decaf as part of the end of the roasting schedule as the roaster is moving in the “cool down” direction. This allows the roast to develop with the aid of the radiant heat from the roasting equipment, resulting in less time that the beans are in the roast chamber and less energy needed to develop the roast.

Commonly decaf coffees are scheduled for the first roasts of the day when the roaster is cold. The logic is that less heat will be directed into the roasting bean mass, since the drum is drawing much of this heat away as it warms, allowing for a longer and gentler bean development. As a result, what tends to happen with this approach is that beans spend an unnaturally prolonged time in the roast chamber with more heat and airflow stripping away the beans’ positive flavor qualities.

#### **Charge Temperature (Drum Roaster):**

Once the roaster has reached operating temperature, use a lower charge temperature – anywhere between 25° - 35° F lower (14° - 20° C) than what is used for roasting regular beans.

#### **Adjusting Airflow:**

Experiment with airflow (depending on the roasting equipment’s control factors of airflow into or out of the roast chamber) as a tool for controlling bean development rate and ensuring an even roast with the best resulting cup quality. The sensitivity of decaffeinated coffee beans makes them susceptible to having their positive cup qualities/flavor stripped away when too much time is spent in the roast chamber under higher airflows, due to the efficiency of convection heat transfer.

#### **Roast Development:**

Once first crack is underway and wisps of smoke can be seen emanating from the beans in the tryer begin gently reducing the heat input of the roaster. This will create sufficient time between 1<sup>st</sup> and 2<sup>nd</sup> crack, which is critical for the development of positive cup characteristics. However, this also creates the danger of stalling the roast – a drop in roast chamber temperature – if the heat input is reduced too much or too quickly.

#### **Visual Cues:**

Checking the beans with the tryer during the roast is always an important practice when roasting any coffee bean. As SWISS WATER® Process decaf beans are already slightly darker green before the roast begins, the roaster-operator needs to pay very close attention to bean development with the aid of the tryer while listening for first and second crack to guide their adjustments.

#### **Cupping:**

Cup it! And confirm you will be giving your customers the highest quality coffee experience!

#### **Questions, comments: Call Mathew at SWDCC 1.800.667.6181 Ext 216**