

Espresso Beans or Ground

- Store porcelain cups on top of the machine to keep warm, and do not stack more than 2 high.
- Always preheat the cup.
- Always dose coffee correctly and use correct filter- holder: 1 for a single in the single handle, 2 for a double in the double handle.
- Tamp properly with proper force and a twist at the finish.
- Do not tap the filter holder after tamping.
- Purge water from the group for 1 – 2 seconds before inserting filter holder.
- Whenever possible, brew directly into serving cup. However, always brew espresso and cappuccino directly into the cup you are serving in.
- Discard spent grounds immediately after use and wipe out any residue with dedicated brush.
- Always reinsert the filter- holder in the group to retain heat. A cold handle will affect the quality of the coffee.
- Always use proper tools for measuring ingredients to ensure consistency.
- Do not serve lemon peel with espresso.



ESPRESSO EXTRACTION PARAMETERS

PROPER EXTRACTION

- Properly prepared espresso should have a caramel to cocoa-colored crema.
- There may be dark streaks known as “tiger stripes.”
- The crema is long lasting and thick (3 – 4 mm).
- The taste is balanced and flavors intense.
- The aftertaste is pleasant and long lasting.

PARAMETERS

Coffee Dose: 7 gm +/- 0.5 gm

Coffee Temp: 190° – 197°F

Pump Pressure: 9 bar +/- 0.5 bar

Extraction Time: 25 – 30 seconds
(not including pre-infusion)

Volume in the cup:
25ml (25g weighed
on a gram scale or
measured without
crema in a beaker)



UNDER-EXTRACTION

- Thin, light colored layer of crema with big bubbles.
- Crema dissipates rapidly.
- The flavor can be flat and weak but high in acidity.
- The body is low.

CAUSES

coffee stale

dose less than 6.5 grams

water temp. less than 190°F

pump pressure below 8 atm

extraction time under 20"

grind too coarse

light tamp

cold cup



OVER-EXTRACTION

- Crema may be thin and dark with visible bubbles, punctuated with a large white spot, a hole or both.
- The flavor is bitter and woody.
- The aroma is burnt and strong and the aftertaste sharp.

CAUSES

dose over 7.5 grams water

temp. above 200°F pump

pressure above 10 atm

extraction time over 35"

grind too fine

tamp too hard

filter and diffusion

screens dirty

worn grinder blades



GRINDER ADJUSTMENT

The coffee must be adjusted throughout the day. Environmental conditions such as high or low humidity will have an effect on the extraction times.

NOTE: Make sure that the coffee tin has been opened at least 8 hours in advance. The coffee must de-gas to adjust to the new atmospheric conditions.



3K BEAN TIN

Always use the double filterholder for adjusting grind



1

If using a doser grinder: grind coffee into the doser filling it at least 1/4 full to ensure the doses are full. 2 full pulls on the handle to fill the filter basket.

If using an on demand: place the filterholder in the fork under the funnel and press the double cup to fill filter basket with coffee.



2

(See Espresso Preparation instructions)

Time the extraction starting from the moment you coffee until it shuts off. (Do not include the pre-infusion in the 25-30 seconds).



3

BEFORE MAKING ADJUSTMENTS:
Make at least 2 in order to verify the extraction time. **If the coffee is pouring 25-30 seconds for 50ml no action is necessary.** Adjustment **IS** necessary if the espresso is pouring faster than 25 seconds for 50ml is pouring longer than 30 seconds for 50ml.



4

BEFORE MAKING ADJUSTMENTS:
If using a doser grinder: empty the doser of coffee.



5

Near the adjustment collar there will be an indicator of which direction to turn for fine or coarse grind.

Coarse = faster pour / Fine = slower pour

NOTE: After each adjustment grind and discard 25-30g to clear the chamber



6

Repeat process from step 1 until you achieve 25-30 seconds for 50ml.

TYPES OF ADJUSTMENT

Locking Adjustment Collar

Pushing down on a small foot or locking pin on unlocks the collar. The collar will turn +/- to



adjust and click into position and the collar will lock in place once the pin is released.

Free Moving Collar

Some models have a free moving collar with no locking



pin, the collar moves freely +/- to adjust. This type allows for micro adjustments.

Knob Adjustment

Some models have knob to turn for adjustment +/- . Some adjustments require quarter



turns others are marked with numbers to indicate the amount of turn.

ESPRESSO PREPARATION WITH ON DEMAND GRINDER

The cup should be preheated

When preparing an espresso or cappuccino, brew directly into serving cup. When making several drinks, the espresso should always be the last item prepared before being sent to the table.

Do not serve lemon peel with espresso

Properly prepared espresso should have a caramel to cocoa colored crema, there may be dark streaks known as "tiger stripes." The crema is long lasting and thick (3-4 mm).

Espresso Golden Rules:

Coffee Dose: 7 grams +/- 0.5

Coffee Temp: 194° -201° F

Pump Pressure: 9 bar +/- 0.5 bar

Extraction: 23-30 seconds

Volume: 25ml/25g



PROCESS



1

Place filterholder in the mount below the grinder funnel.



2

Choose the desired dose and press the corresponding button. (1 cup for a single filter. 2 cups for a double). Hold the filterholder steady as it fills with ground coffee. The grinder will shut off automatically.



3

Rest the filterholder against the edge of the counter. Firmly pack down while twisting the tamper so the coffee forms a solid cake. **Do not tap the filter holder. Once you have tamped it disrupts the seal between the edge of the filterholder and the coffee.**



4

Wipe excess ground coffee from the lip of the filterholder using the dedicated filterholder brush.



5

Purge water through the grouphead for 1-2 seconds.



6

Insert the filterholder into the group head of the espresso machine. Place cup(s) below the spouts.



7

Press the single or double brew button to start the desired brewing cycle. (25 ml single or 50 ml double). Start counting the extraction from the moment you see the coffee. **If the time is too long or too short, refer back to grinder adjustment instructions.**



8

After the brew cycle has completed, remove the filterholder knock the used coffee grounds in the dump box.



9

Wipe any excess coffee out of filter with a brush. Place filter holder back in the group head of the machine.

ESPRESSO PREPARATION WITH DOSER GRINDER

The cup should be preheated

When preparing an espresso or cappuccino, brew directly into serving cup. When making several drinks, the espresso should always be the last item prepared before being sent to the table.

Do not serve lemon peel with espresso

Properly prepared espresso should have a caramel to cocoa colored crema, there may be dark streaks known as "tiger stripes." The crema is long lasting and thick (3-4 mm).

Espresso Golden Rules:

Coffee Dose: 7 grams +/- 0.5

Coffee Temp: 194° -201° F

Pump Pressure: 9 bar +/- 0.5 bar

Extraction: 23-30 seconds

Volume: 25ml/25g



PROCESS



1 Grind coffee to completely fill 3 doser compartments on the right. If the compartments are not covered you will not dose the proper amount of coffee.



2 Place filterholder below the doser. Pull the doser handle forward to release coffee dose. Let the handle go and it will "snap" back.

1 pull for a single filter
2 pulls for a double filter



3 Rest the filterholder against the edge of the counter. Firmly pack down while twisting the tamper so the coffee forms a solid cake. **Do not tap the filter holder. Once you have tamped it disrupts the seal between the edge of the filterholder and the coffee.**



4 Wipe excess ground coffee from the lip of the filterholder using the flat surface of the tamper.



5 Purge water through the grouphead for 2 seconds to stabilize temperature and clear diffusion screens.



6 Insert the filterholder into the group head of the espresso machine. Place cup(s) below the spouts.



7 Press the single or double brew button to start the desired brewing cycle. **(25 ml single or 50 ml double).** Start counting the extraction from the moment you see the coffee. **If the time is too long or too short, refer back to grinder adjustment instructions.**



8 After the brew cycle has completed, remove the filterholder knock the used coffee grounds in the dump box.



9 Wipe any excess coffee out of filter with a brush. Place filter holder back in the group head of the machine.

Milk Steaming

- For hot drink preparation, whole milk is recommended (Unless alternative is requested by the customer)
- For best results, have several sizes of pitchers on hand (12 oz, 20 oz and 32 oz).
- Always use a clean pitcher and fresh cold milk.
- Steam only the amount of milk you need for the drinks you are preparing .
- Fill pitcher 40 – 60% of capacity (Or to the bottom of the spout) with milk; DO NOT overfill.
- Place the tip of the steam wand over the drain tray grates and purge the wand for 2 – 3 seconds to ensure the steam is full and the tip is clear of blockages.
- Keeping the pitcher straight, angle the wand just off center into the milk, keeping the steam tip right below the surface to ensure proper air injection at the start.
- When engaging the steam, hold the pitcher steady. Slowly move the pitcher down as you steam to build froth.
- Do not move the pitcher around in circles or bounce up and down, This creates big bubbles.
- Place free hand on the side of the pitcher. When the pitcher feels warm, slowly move the pitcher up so the tip is just below the surface.
- The final temperature should be 140-160°F. (If using a thermometer, disengage steam at 130-140°F
- Place pitcher aside after steaming and purge the steam wand and wipe down with a dedicated, sanitized towel.
- Tap pitcher on counter to remove big bubbles then swirl the milk until it is shiny.
- Consistency of the milk should be like wet paint
- Pour quickly through the center of the coffee. Pour from a high angle for Caffè Latte, low angle for Cappuccino



MILK STEAMING HEATING AND FROTHING

Stock several size pitchers. A standard set includes a 12 oz, 20 oz and 32 oz size.

Steam only the amount of milk you will need for the beverage you are preparing.

For best results use a straight sided stainless steel pitcher with a pointed spout



The consistency of the froth will vary depending on the fat content in the milk.

Whole Milk is recommended for hot drinks.

Skim/low fat for cold beverages.

PROCESS



1

Use a clean pitcher and fresh cold milk. Do not overfill the pitcher. Only use the amount of milk needed for what is being prepared. Fill just below the bottom of the spout.



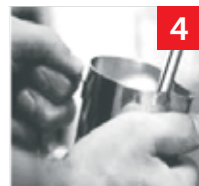
2

Place the steam wand over the drip tray. **Do not touch the metal it is very hot.** Turn the knob to open the steam valve for a few seconds. (May be push button or lever) This purges the wand and tip. **This eliminates condensation and ensures the wand is clear of any blockage**



3

Place the steam wand tip just under the surface of the milk. Angle the steam wand slightly off center towards the wall of the pitcher. Do not submerge it deep. Build the froth at the surface while the milk is cold.



4

Turn on the steamer. Keep the wand near the surface. Place your free hand on the side of the pitcher. There will be a high pitched hissing.



5

Build the froth by slowly moving the pitcher down; do not move in circles or bounce up and down, keep steady.



6

Once you feel a little heat and build a good head of froth, dip the tip of the wand deeper in the milk(3/4"). The milk will begin to roll. This action will create the thick microfroth. **If the milk rumbles it is burned.**



7

When the side of the pitcher is hot to the touch, turn off the steam. The final temperature range 140°-160°F.

HANDLING AND POURING



1

As soon as you are done steaming, put the pitcher down and let it rest for a few seconds.



2

While milk rests, purge and wipe down the wand. **Always use a dedicated sanitized cloth for steam wand cleaning that should be used for only this.**



3

Tap the pitcher on the counter to get rid of any big bubbles then swirl the pitcher. Watch the surface of the milk as you swirl; it will appear shiny and smoother.



4

When pouring, the milk should look like the consistency of wet paint.



5

Once the milk has been swirled begin to pour into the coffee right away while it is mixed.

MILK POURING BASICS

Caffè Latte

When making a Caffè Latte, fill the cup almost to the top by pouring quickly from a high angle to allow the milk, which is heavier than froth, to fill the cup.

Then bring the pitcher down to a low angle slowing near the top to allow froth to finish the cup.



Cappuccino

When making a cappuccino, swirl and pour close to the cup, in the center. Pour quickly to ensure proper froth to milk ratio.

When preparing two cappuccinos, to ensure proper ratio of froth and milk, swirl the milk and pour 1/2 into another pitcher or container and set it aside. Pour the first cappuccino and then pour the milk you set aside back into the pitcher, swirl and pour the second.



Pouring in larger paper cups requires speed and practice. If it is challenging to get the correct ratios of milk and froth for pouring a latte or cappuccino in a large to go cup, it may be useful to use a spatula to ensure that there is the correct ratio of froth to milk.

