INTRODUCTION

Having skilled, competent baristas operating the machine is crucial to the café’s success. Having unskilled staff serving below average coffee is the quickest way to destroy the café’s reputation and general business success.

Our espresso training is tailored to the needs of café operators, and includes “introductory” training for beginners and focused training for more accomplished coffee makers.

Training is not a one off event – it’s an ongoing process – in successful cafes it is embedded into the business culture.

PREPARATION

There are many factors which must all be prepared well to ensure your customers return for your great espresso.....

- **Fresh**
  Freshly roasted coffee will remain usable for up to 9 days, provided the beans are kept dry, cool and away from the light. Always grind the coffee just before use and don’t grind and fill your doser unit, as ground coffee will lose its vitality very quickly.

- **Clean**
  Coffee should be treated like any food. Everything that comes in contact with it and the coffee machine must be clean

- **Hot**
  Water, milk, group head, handles and cup should be hot

- **Fast**
  Preparing coffee with efficient, careful speed ensures it is served to your customers whilst fresh, hot & delicious

- **Consistent**
  Your customers will return for your great coffee when it is made well, served fast and hot, prepared using the same recipe and presented the same way – every time – regardless of who is making it!
USE & STORAGE OF COFFEE BEANS

Celcius Coffee will only ever supply you with the freshest, premium 100% organic, licenced fairtrade coffee.

Freshly roasted coffee is at optimum between 7 and 10 days after roasting.

Only grind the coffee as you need it. DO NOT be tempted to grind your beans in advance, as the coffee will be exposed to air and will deteriorate and quickly go stale.

Beans should be stored in a cool, dry, dark place, preferably in an airtight condition, away from direct sunlight.

It’s preferable to remove any beans from the grinder hopper at the end of each day and pour in to an airtight container for overnight storage.

GRINDING COFFEE, DOSING COFFEE, TAMPING COFFEE

Must Read Information!

Coffee is freshest immediately after it is ground. After grinding coffee beans, the volatile oils that were previously protected inside the bean are exposed to the air which oxidizes and stale the coffee.

This effect occurs immediately after coffee grinding so it is important to tamp and extract the espresso as quickly as possible. The coffee grinder should be activated for 15-20 seconds every time a shot is desired, so that only fresh ground coffee is used. Instead of two pulls on the doser, the barista should pull several times until the entire basket is filled with ground coffee.

Espresso coffee should be ground to a size in which the extraction process takes 23-28 seconds. It is important to only adjust the grind and not the pressure one tamps with to control the flow rate. In addition to particle size, the humidity plays a dramatic role on extraction time. Since coffee is hydroscopic, it absorbs moisture from the air causing a tighter pack and longer extraction time. Thus, the grind setting must be changed slightly throughout the day as the barista perceives changes in extraction time.

Your Grinder

Your grinder is the tool that produces small volumes of even-sized particles of coffee.

To extract espresso properly it is essential to use an espresso burr grinder and to grind per order. The two major types of burrs used are flat and conical. Conical burr coffee grinders are desirable because they increase the surface area of each particle and the amount of flavor that can be extracted from the coffee. Since a conical burr grinder has longer cutting edges, the burrs can rotate at lower speeds, which reduces the heat created.
Grinding Coffee

As a guide, if your grind is at the correct level, if should ‘ball up’ in to clumps of ground coffee, referred to as **snowballs**. Grinders do vary and it’s important to check which direction on your grinder will make the grind finer and which will make it coarser. There are also factors that can influence your grind, such as humidity/moisture in the air and your grind will need continuous ‘tweaking’ to allow for these changes.

It’s best to only make minor adjustments to your grind each time; until you are satisfied you have it right. With practice, you will know when you have the correct grind for the conditions. And it makes perfect sense then, only to grind the coffee as you need it.

Adjusting Your Grinder Settings

In order to achieve finer or coarser grinding, the adjustment disk located under the hopper must be adjusted using the relevant handle.

In order to increase the coarseness of the ground coffee, the disk must be rotated clockwise; to decrease the coarseness, turn the disk anticlockwise.

The adjustment should be performed with the motor on, and preferably without any coffee between the grinding blades.

Grind small amounts of coffee in order to determine the optimal degree of fineness.

Before checking the fineness of the ground coffee, grind some coffee in to the dose and then dose out and discard.

This operation must be done whenever the grinding setting has been changed, in order to empty the duct of the previous ground coffee setting.

If your coffee is coming out of the espresso machine too quickly, it means the coffee is ground **TOO COARSE**. Vice versa, if it is coming out too slowly, it means the coffee is ground **TOO FINE**.

Nonetheless, bear in mind that there are many conditions liable to influence the correct grind, such as the atmospheric conditions (humidity, coldness), the tamping/compacting of the coffee in the basket, the espresso machine settings and the cleaning of the filters.

Dosing Ground Coffee

It’s really important that you dose the correct amount of coffee in to your basket. Ensure you have sufficient ground coffee in the doser to ensure you deliver a full dose in to your basket with each full flick of the lever.
Tamping Ground Coffee

When you tamp the coffee, it’s really important that you do it with a firm, even pressure that will form a solid, flat surface in the basket. If the coffee is not evenly packed in the basket, this will result in a bad extraction and ultimately, a bad cup of coffee!

EXTRACTING COFFEE ‘THE SHOT’

_The shot is the base of all coffees. Create perfect espresso by following this extraction guide:_

1. Dry the basket inside the handle.
2. Dose the basket with freshly ground coffee until level with the rim. For more information, refer to DOSING section.
3. Firmly and evenly tamp the coffee so it becomes perfectly flat and packed. For more information, refer to TAMPING section.
4. Clean any loose coffee grounds off the rim of the handle.
5. Secure the handle in to the pre-heated group head.
6. Place warm cup(s) underneath the spout.
7. Start the shot extraction. There should be a short delay before the coffee pours, between 3-6 seconds. Then the first of the crema will begin to drip from the spout(s).
8. After the initial drips, the bulk of the espresso will flow. The flow will then taper to look like a ‘mouse tail’, and the liquid will be lighter in colour.
9. The extraction should take no more than 25 seconds.
10. You’ve now made the perfect espresso, with a rich, deep caramel-brown crema!
11. You’ll know when you’ve ground, dosed and tamped your basket correctly when you knock out the used grinds and they fall from the basket(s) in a compact, round ‘brick’.
12. Rinse the basket(s) under hot, running water.

THE MILK

Milk is foamed and steamed for the simple reason that you want to enhance and elevate the sensory experience of coffee and espresso in particular.

Coffee is a sensory experience. We want to do everything we can to maximize it. Hot milk with coffee is okay, but does not compare to the texture and full richness of properly steamed and foamed milk. Handled correctly the milk can be transformed.

_With practice and determination, you will be producing superbly steamed milk in no time at all!_
STEAMING & ‘STRETCHING’ MILK

- Fill the correct size milk jug with fresh milk, to at least 1/3 full.

- Before use, open the steam valve to clear any water from the steam vent pipe – this is called “purging”. This prevents diluting the milk.

- To froth the milk, lower the jug so the steam pipe nozzle is just below the surface of the milk. **If you hold the jug too low, it will make large bubbles – NOT WHAT YOU WANT!**

- Hold the milk jug so the steam arm is in the center, to create an even thick froth and create a whirlpool motion with the milk.

- To heat the milk, hold the milk jug so the steam pipe nozzle is near the bottom of the jug, then **fully open the steam valve.**

- **This entire process should be quiet** – if there is a high-pitched sound, then the steam pipe is too low in the jug. Be careful not to steam / heat too long, which will burn the milk. A good guide is the “3 second rule” – once the milk is up to temperature, which should be **65 – 70 °C**, you shouldn’t be able to comfortably hold the outside of the jug for more than 3 seconds.

- Turn the steam valve off.

- Wipe the milk residue off the steam arm with a soft, damp cloth.

- Aim for very small bubbles (preferably no bubbles). Tap the jug on the bench a couple of times to dissipate any large bubbles.

**Now you’re ready to finish making a great coffee!**
ESPRESSO RECIPES

PLEASE NOTE: All drinks should be made with a double shot of espresso, unless otherwise requested by the customer

SHORT BLACK – demitasse cup (70ml)
This is the base of all espresso beverages
Place a demitasse cup under the group head and extract a double shot. Serve immediately!

RISTRETTO – demitasse cup (70ml)
The most concentrated of all espresso beverages, the ristretto is a ‘restricted’ short black
Place a demitasse cup under the group head and extract a shot, restricting the pour, stopping the extraction at about 2/3 of the shot. Serve immediately!

LONG BLACK – tulip cup (150ml)
The extraction is poured on top of the water so the crema is not disturbed
Fill the cup just over half full with hot water from the espresso machine. Then, place the cup with water under the group and extract a double shot over the hot water. If requested, serve the long black with a small jug of hot water.

AMERICANO – cappuccino cup (190ml)
Made in a larger cup (therefore more hot water). Like the Long Black, the extraction is poured over the top of the water. Because the surface area is greater, it’s more difficult to retain a crema
Place the cup under the head and extract the double shot over the hot water. Note: The crema should form completely over the hot water and the cup is still not full. Serve with a small jug of hot water.

MACCHIATO – demitasse cup (70ml)
A short black ‘marked’ with hot milk
Place the cup under the head and extract the double shot. Add the mark of milk to the espresso by spoon.

FLAT WHITE – tulip cup (150ml) or cappuccino cup (190ml)
Flat white drinkers are often the most fussy about the way their drink is prepared. Ensure the milk has very little froth and is still textured enough to carry without spilling
Extract a double shot in to the cup, then ease the smooth flat steamed milk into the centre of the coffee, holding back the majority of the froth with a spoon OR you can remove the majority of the froth from the milk jug with a spoon, before pouring.
LATTE – glass (220ml) or cup (250ml)   BOWL LATTE – bowl (350ml)

*The texture of the milk in a latte can be slightly thicker than that of the flat white*

Extract a double shot in to the cup. Pour and allow the thicker, lightly textured milk to flow in to and mix with the espresso. **TIP:** If using a BELL SHAPE JUG, to ensure a consistent pour of the thicker, frothy milk, pour from the side of the jug.

*Bowl Latte – milk should be the same as the standard latte but ensure you swirl the milk and keep it blended due to the size of the beverage.*

CAPPUCINO – cappuccino cup (190ml)

*A double shot with a very thick, head of frothy milk*

Carefully spoon all the heavily textured top milk in to the cup then pour the hot, lightly textured milk through the centre of the frothed milk **OR** hold back the heavily textured milk and pour approximately ½ a cup of lightly textured milk in to the double shot. Use the spoon to push the remaining, heavily textured top milk in to the remainder of the cup. A dome of thicker foam will rise up above the rim of the cup. Sprinkle with plenty of chocolate powder or a lighter sprinkle of cinnamon.

MOCCACCINO – latte cup (250ml)

*A double shot of espresso with chocolate powder, combined with lightly textured milk*

Add 1 tablespoon of chocolate powder to a cup, place the cup under the group head and make the double shot in to the chocolate powder. **Mix well.** Pour the textured milk in to the espresso/choc mix. **TIP:** If using a BELL SHAPE JUG, to ensure a good volume of the heavily textured milk goes in the drink, pour from the side of the jug. Sprinkle with plenty of chocolate powder.

HOT CHOCOLATE (milk should be made as per Latte)

Either use your pre-made chocolate syrup or add 3 heaped tablespoons of chocolate powder to a cup. Add small amount of hot water from espresso machine tap and mix well. If serving a takeaway cup, add 2 marshmallows at this point. Steam your milk. Pour the textured milk in to the espresso/choc mix. Sprinkle with plenty of chocolate powder. If serving with cup and saucer, place 2 marshmallows on the saucer.
BASIC TROUBLE SHOOTING

Under-extracted shot

It’s common to dose the basket a bit light, which will mean your shot will be under-extracted – the pour will be too quick and the espresso will taste sharp.

Over-extracted

Equally so, if you over fill the basket, the shot may be over-extracted – the pour will be too slow, without crema and the espresso will taste sharp and burnt.

No Steam Pressure

At very busy times, when you’re machine is experiencing a high workload and you are using the hot water supply to make pots of tea, you may find the water pressure can drop. (This is normally on experienced with smaller machines with less water capacity). If you find you have lost steam pressure, you will need to wait several minutes to allow your machine to refill and for the water to reach optimum temperature.

CLEANING & MAINTENANCE

Coffee Handles

Periodically remove the filter baskets from the espresso handles to soak them in hot, soapy water and scrub clean the interior of the handles.

Steam Arms

After EVERY use, wipe with steam arms clean. Every couple of days, soak the steam arms in warm water for no longer than 10 minutes, never overnight to soften Current milk residue. Remove the screw-on steam arm head and poke through the holes with the end of a paperclip or a pin, to clean out any built up milk residue.

Group Head Back flushing

Backflushing your machine is an every day event that should take place if you are running a café making espresso coffee. This also applies to home users and espresso enthusiasts who wish to keep their espresso machine in good working condition, enabling the best possible extraction from the machine.

- Scrub the group head with the head clean brush, running it around the group head to remove any coffee grind residues.
- Pop out the filter basket in the espresso handle and replace with a blank/blind disk.
- Place the handle in the group head and start the water flow.
- After 5 seconds, stop the water and rinse out the blank disk.
- Repeat several times until no more coffee grinds appear.

GUIDE: If you are making up to 50 coffees per day, then you should complete this process twice per day. If you are making 50+ coffees per day, you should repeat this process regularly throughout the day.
Group Head Back flushing with Head clean Shampoo

Coffee oils coat the hot working surfaces of the espresso machine’s group head. If the oils are not removed, they will spoil the delicate espresso flavour. Use head clean shampoo to remove baked-on, rancid oils, leaving the group head surfaces squeaky clean.

Once every few days you will need to back flush using head clean shampoo, to ensure you are cleaning the group heads properly.

- Scrub the group head with the head clean brush, running it around the group head to remove any coffee grind residues.
- Place ¼ of a teaspoon of Head Clean Shampoo in to your blank/blind disk.
- Put the filter handle into the coffee machine as though you were going to make coffee and start the water flow.
- Count to ten and repeat this process three times. You should see white froth coming from the bottom of the group head via the exhaust tube. (In some machines this part is internal and you will not see the froth, but this is nothing to worry about).
- Lastly run the continuous flow button on the group until no further white froth can be seen.
- Repeat entire process for each group head.

How Often Should You Use Head Clean Shampoo?

If you are making 150+ coffees per day, then you should complete this process every second day, if not every day. If you are making less than 100 coffees per day, you should repeat this process twice a week.

Drip Tray and Rack

Periodically remove from the machine, rinse and wipe clean with a soft cloth.

GRINDER CLEANING & MAINTENANCE

Several times a week at the end of the day, switch off the grinder, close off the bean flow, empty the beans from the hopper and wipe it clean. Remove any remaining ground coffee from the doser and use a soft cloth or brush to remove any loose grinds in the grinder.

Ask your coffee supplier and/or servicing agent if you think your burrs need checking or the grinder needs servicing.

REGULAR “PROFESSIONAL” SERVICING

Just like a car, espresso machines need regular servicing. Celcius Coffee recommends you have your machine fully serviced every 6 months. Preventative care is the best care you can offer your machine and ultimately your business.
ADDITIONAL USEFUL INFORMATION

The link below will take you to an online “grind setting” YOUTUBE tutorial: https://www.youtube.com/watch?v=CLoHT-UFJDc

The link below will take you to the full online user guide for Mazzer Grinders: http://www.lamarzoccousa.com/wp-content/uploads/2014/03/Mazzer-All-E-Grinders-User-Manual.pdf

QUESTIONS?

Contact Celcius Coffee

Stephanie 021 226 3333
Email info@celciuscoffee.co.nz
Visit www.celciuscoffee.co.nz