

**T**he perfectly prepared espresso shot will consist initially almost entirely of the crema, which begins to settle immediately. The shot is intense, flavorful, complex, lively, thick, and drinkable from start to finish. To achieve this, you need to be passionately dedicated to the disciplines surrounding the maximum extractions. Take special care in grinding, dosing, tamping and observing the pour. Deviation from those steps will result in less notable results.

## GRINDING THE BEANS

**Operation:** Only fill the hoppers half full of coffee beans and always grind only as much coffee into the doser as you'll need in order to produce the beverage of the moment. Try to empty the chamber every time you dose; that is, don't grind more than you need and leave it to go stale in the doser.

**Grind Settings:** The same espresso grind settings will produce different results depending on the weather. Humidity, especially, will affect the grind. Always adjust the grind in small intervals; never adjust more than one notch at a time. Monitor the shots to determine optimal settings for current conditions.

**Maintenance:** Clean the grinder completely every night, vacuuming the grounds from the dosing chamber. Wipe all equipment obsessively. Change the grinder blades after 600 pounds have gone through the hopper.

## DOSING AND TAMPING

**Dosing:** Try to empty the chamber every time you dose. As you dose, over fill the portafilter basket. Use your pinky to level the portafilter and evenly distribute the ground coffee. Then push the excess into the dosing chamber, or better yet, the knockbox. Pay attention to develop consistent dosing behavior to minimize dosing as a margin of error.

**Tamping:** Using a tamping mechanism designed to fit your portafilter tightly. Tamp using a straight arm, first applying five pounds of pressure. Tap the portafilter with the butt end of the tamper, and tamp down the dose again, this time harder, using between 30 and 50 pounds of pressure.

**Preparing:** Use the palm of your hand to wipe the rim of the portafilter; this prevents coffee grounds from being pressed into the group gaskets and helps maintain supple group gasket seals. Lock the portafilter firmly in place to form a tight seal with the group gasket.



## PULLING SHOTS

**Size:** We recommend that you pull at least double shots (14 gram baskets). We never pull single shots, (which use only 7 grams of coffee). In fact, we have found best results serving triple shots: 21 grams of fresh ground espresso go into our portafilter for the shot.

**Timing:** Pull shots short, ristretto, before the bitter over-extracted whitish-end of the shot. Watch the shot carefully. When the shot begins, you should hear the pre-infusion. Start your timer, then start of the shot. The shot should ooze slowly at first. At 10 to 15 seconds, a perfect shot will have dark red-brown mottling on the surface.

Remove the cup after around 30 seconds, the moment before the color of the shot begins to lighten. This should yield between 1.5 and 1.75 ounces in the cup, total shot volume (mostly crema). The pour should finish about 20 seconds from the time the shot first appears. If the shot goes longer than 25 seconds, adjust the grind to be coarser. If the shot takes less than 20 seconds, adjust the grind finer.

**Serving:** Always pull your shot into the cup you are serving it in. Pre-heat that ceramic cup with hot water before you pull the shot into it. Espresso should be served in a demitasse with a total capacity of no more than three ounces. All drinks, but especially espresso shots, should be served to the customer immediately.

