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Owner, [Espresso Vivace](#) and your host at [Schomer's Table@Lucidcafé](#)

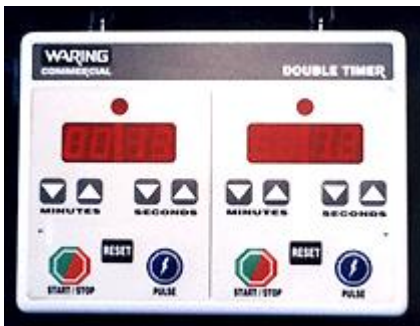


On The Table #25

Innovations—Dosing Control: Timing Your Grinder

Dear cyber reader, Many thanks to Scott Rao for locating a flexible, commercial grade appliance timer to control grinding time. (See photo)

Made by the Waring Company and available at Superior products, the unit is simply called the Commercial Appliance Timer. It is available in a double unit, which I use to operate my regular and D-Caf grinders independently for about \$180.00. Waring also manufactures a single timer as well. The unit numbers for ordering through Superior are #6-w-216 for the double and #6-w-214 for the single timer. (Superior Products 1.800.328.9800)



A commercial appliance timer manufactured by Waring Company

The idea of timing the grinder to control dosage had been around Vivace for a long time, I think my wife and partner Geneva, an accomplished "tekkie", suggested it several years ago. I was busy with temperature research, and was also pursuing dosage control through redesign of the whole hopper. (Please see my article [Innovations—The Dosing Hopper](#)). Many grinders have timer switches of course, but all lacked the precision and flexibility to serve in a fast paced espresso operation, where the choice has been made to grind each shot upon demand.

Dosage Control

On Italian made espresso grinder/dosers a finned measuring device is built in to measure ground coffee and attempt to control waste.

These designs measure well when a consistent quantity of ground coffee is maintained in the hopper. Otherwise when the hopper is full the weight of the ground coffee packs more coffee into the finned chamber increasing the volume delivered with each pull on the handle. As the chamber runs lower, dosage of ground coffee is decreased. We know that dosage is intimately related to flow rate of the espresso coming out of the machine, and every child above the age of six knows that must be very precisely controlled to maximize flavor and texture

of the espresso in the cup.

In addition, ground coffee in the hopper begins to oxidize right away, degrading the aromatic essence of coffee directly. Oxidation is the chief reason we grind per order.

Ground coffee is also hygroscopic, exchanging water molecules quite quickly with the surrounding atmosphere. Thus a pile of ground coffee will have changing moisture content as it sits for even a few minutes. Absorbing moisture will cause ground, packed coffee to slow down the flow of water through it. In times of higher humidity, a coarser grind is needed and vice versa. Precise control of flow rate is a secondary reason we grind per cup.

Precise Flexibility

On the Waring unit a digital readout displays the time that power is delivered to an AC outlet on the side of the timer. It is easy for the high volume barista to see the time that the grinder will grind. During times of higher humidity a coarser grind is required to maintain optimum flow rate, which will require a slightly shorter grinding time to achieve the same packed volume. The Waring is instantly adjustable on the bar. Simply scroll upwards or downwards and watch the readout change, one second at a time. Finer grinds require a slightly longer grinding time. We find that the easy adjustability makes this the ideal unit to control the grinder.

Staff Report

The biggest problem with the timer is that the button to start the timed cycle is finicky. In operation the unit ends up training the staff: some timers respond to a push on the upper corner of the round push button area, other timers respond best to pulling your finger across it from top to bottom before that particular timer will activate. (The switch is under the flexible plastic surface and is designed to start the cycle with one push of a fingertip.) Each timer is a little different in this regard. But once the staff figures it out they do not seem to have serious trouble with the timers failing to activate with a single push. And, after six months of a trial here at Vivace, the switches do not seem to wear out. Scott reports that his have been in service even longer without deteriorating.

Even with the slight drawback, the staff uniformly loves the timer. It eliminates coffee waste by removing the guesswork on how long to run the grinder to grind a shot, and frees them up from reaching over to turn off the grinder. Making hundreds of espresso coffees on their shift, eliminating a step is significant.

Ciao for now!