



"Mini" K-Cup Filler and Sealer Machine HT-F20R & HT-F20RS



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ABOUT THIS GUIDE

We've put together this **First Use Guide** to walk you through everything needed to set up your Haitec HT-F20R (12-15 CPM) or HT-F20RS (15-25 CPM) "Mini" K-Cup Filling and Sealing machine—from equipment and area prep to machine setup and startup.

Your Mini K-Cup machine is very sensitive and precise but also robust and an incredibly well-built piece of automated equipment. It has made a long journey to reach you, via ship, plane, railroad, truck, etc. Due to this transportation, the machine may require a bit of fine-tuning to get "settled in." Great news: This fine-tuning is typically an easy and painless process. This is to be expected with automated machines of this type.

When you first start working with your Mini, you'll pick up certain nuances and patterns that will become part of the basic operation. Again, this is very typical when working with air pressure mechanism actuators. Please be patient as you learn the processes.

See our full <u>Warranty Support Procedure</u> at the end of this **First Use Guide**.

For additional instructional and video resources, please visit our <u>Haitec Resources page</u> on our website.

If you still have questions, contact us at 855.585.2500 or at support@coffeeequipmentpros.com.

View full warranty (scroll to bottom of page).

EQUIPMENT AND AREA PREP

Air Compressor Setup

- 1. Ensure your air compressor delivers a minimum of 90 psi at 4.5 cubic feet per minute (cfm) with a minimum 20-gallon reserve tank. Your Mini has multiple functions that require air to operate, so it is important to keep the supply consistent and at the required levels. Otherwise, the machine will sense a differential and stop with an error code stating accordingly.
- If you don't own an air compressor, you can purchase one from reputable retailers like Lowes, Home Depot, Tractor Supply, Grainger, or even Compressorworld.com for typically \$1,000 to \$1,500.
- 3. Note that the Mini includes a built-in water separator; however, an additional air dryer is advisable in high-moisture locations.
- 4. The digital pressure display is in "mpa." The suggested range (87 116 psi) is .6 to .8.

Hose Selection and Connection

Purchase a $\frac{1}{2}$ " clear, rigid flex hose with ample length to reach the machine's placement area, nicely tethered for safety. This $\frac{1}{2}$ " hose will tightly fit into and connect to the machine's metric quick-fit connector. Check and adjust if needed after turning the air compressor on. If the machine will be portable, you may choose to insert another $\frac{1}{2}$ " quick-connect coupler for easy removal.

Electrical Requirements

- The machine operates on a 220v, single-phase, 20-amp, 3-wire plug system. The <u>Machine Setup</u> section of this document provides more information on this.
- 2. Note: The Mini only uses approximately 6-7 amps.

Preparation of Installation Area

- 1. The Mini has a plexiglass enclosure on its sides and front that swings open about 18".
- 2. Clear a space with a two-foot radius around the machine for access.
- 3. This is an automatic moving machine. Please treat it with respect.

MACHINE SETUP

Unpacking Machine

- 1. Unwrap the machine from its plastic packaging.
- 2. Remove the tool kit located inside the rotating table.
- 3. There is a convenient air gun attached for keeping your rotating table area clean.

Preparing Machine for Use

- 1. Wipe off any machine oil from the interior and exterior surfaces that may have remained from manufacturing. A stainless steel spray cleaner works really well.
- 2. The plexiglass doors may need some cleaning as well, including removing any protective plastic sheet left over from manufacturing.
- 3. Position the machine in its designated location.
- 4. Securely lock the wheels in place to prevent movement.
- 5. Cut any nylon ties securing the moving mechanisms during transport.
- 6. Ensure all parts are freely movable by gently wiggling and testing movement.
- 7. Check and tighten (if necessary) the set screw of the lid sealer heater shaft. It is located underneath the heating mechanism at the top of the shaft.
- 8. Connect the air pressure hose to the water separation unit located on the lower left side of the machine. Use a 1/2" rigid plastic hose that fits into the mm 90-degree fitting.

Wiring

We recommend that you seek assistance from an electrician to confirm and set up the electrical connection.

- 1. The machine has a USA-type 20-amp, 3-wire plug comprising one ground and two hot leads, each at 110v. This is known as a "split-phase" system. These leads are interchangeable, and **there is no white/neutral connection on this machine.**
- 2. Confirm that the connection terminals on both the plug and receptacle match exactly.
- If necessary, replace the plug to match your receptacle. Remember, this machine does not have a neutral connection. If you are using a 4-pin 220V receptacle, leave the neutral connection empty on your plug.

- 4. If rewiring is required, open the back cabinet of the machine to verify and confirm the connection. The bottom three points on the right side long connection block are for the 220V power and ground.
- 5. Once the electrical setup is confirmed, plug in the machine.

Turning On Machine

- 1. Make sure there are no obstructions on the rotating table.
- 2. Make sure the lower hopper clamp is facing toward the back of the machine. Otherwise, it may interfere with the cup de-nesting mechanism.
- 3. Turn on the machine using the main switch.
- 4. The LCD screen, along with the lights on buttons and digital temperature readout, will activate.
- 5. The table will do a rotation in preparation.
- 6. The lid sealing temperature will start to climb
- 7. Adjust the lid sealing temperature to 190 degrees:
 - a. Press the green button on the far left to enter adjustment mode.
 - b. Use the up or down arrows next to it to make the adjustment.
 - c. Press the green button again to finalize the adjustment.
 - d. The temperature will begin to adjust, climbing to the desired setting.
 - e. If, after doing a seal test check on your cups, a higher temperature is needed, simply adjust accordingly.

VERY IMPORTANT: The lid sealer becomes very hot. Use extreme caution when placing your hands around it, as burning will occur upon touching. Be very careful when removing cups from the table when close by.

GETTING FAMILIAR WITH THE MACHINE

During Initial Startup (Or As Needed)

- 1. **Load cups.** You can slide many cups through the opening and up, even beyond the tube. Then, drop them down into place. They tend to stay together nicely.
- 2. Get familiar with pulling the cups up off the de-nester mechanism at the bottom. Notice how the cup lid rests on the de-nester before dropping.
- 3. **Load lids.** Lift the gravity weight up out of the lid receptacle and carefully load your lids, top side down. The machine will flip the lid as it places it onto the cup.
- 4. No coffee is needed at this time.
- 5. Navigate to the LCD screen:
 - a. Press the OPERATION button on the top navigation bar.
 - b. Notice the cup-per-minute speed adjustment.
 - c. Notice the counter and resetting option.
 - d. Notice all the individual process mechanism buttons (6) are illuminated green.They each operate one of the six stations. For this process, turn all buttons off.
 - e. Push the yellow jog button to move the table one position at a time.
 - f. You can continue to hold the jog button to simulate operation.
 - g. Then push START to watch the machine in action.
 - h. No cups or lids should be dropping as all the mechanism buttons are off.
 - i. Confirm each operation individually by highlighting it to turn on and either jogging the table or starting a complete operation.
 - j. Suggested first-time simulation (not wasting supplies):
 - i. Start with the cup drop. Illuminate it green by pressing, then push the yellow jog button. The cup de-nester will go to work, dropping a cup down, then dropping it down into the table hole.
 - ii. The next station is a sensor located underneath. It senses if there is a cup in the hole. If not, it will stop and display a warning.
 - iii. Then turn "Lid Suction" on. Experience the lid dropping onto the cup when passing by.
 - iv. The next station is a sensor located above the lid. It senses there is a lid on the cup, the red light turning on.
 - v. If there is not a lid on the cup, the sensor will stop all operations and display a warning.

- When the cup comes to the exit, notice the machine lifts it up and blows air at it to push it off into your receiving container. When testing, the cup will blow out further than normal distance as there is no weight in the cup.
 When under production, if needed, you can adjust this airflow with the silver in-line twist value located right above this area.
- vii. Remove all the cups and lids. BE CAREFUL OF THE HEATING ELEMENT.

The Hopper

- 1. You will need to remove the hopper for cleaning, especially between flavored coffees.
- 2. At the top slider bars, use the provided 3mm Allen wrench to loosen the right stopping block from the rear of the machine or remove it.
- 3. From the front of the machine, paying attention to the air hoses, slide the hopper to the left, suspending it off the machine base far enough to lower the hopper without the table obstructing it.
- 4. Carefully unbuckle the hopper (3 buckles) and CAREFULLY lower it to remove it for cleaning. Watch the auger when lowering, making sure not to come in contact with it to avoid bending.
- 5. When replacing, carefully lift back into position, twisting the hopper to a smooth contact with buckles aligned. NOTE: YOU CANNOT REPLACE THE HOPPER WITH COFFEE IN IT AS THE AUGER WILL NOT BE ABLE TO SINK DOWN INTO ITS CHUTE.
- 6. When ready, slide the system back to the filling position on the slider bar.
- 7. Ensure centering over the cup fill position hole.
- 8. Tighten both stopping blocks on both sides of the slider bar.

Adjusting Coffee Grams Dispensed

- 1. Your machine is preset at 11 grams of coffee dispensed per cup.
- 2. If you need to adjust it, move the hopper on the rails to the testing position by loosening the right stopping block, sliding it to the end of the rail, and securing it. Then, lower the hopper so the filler nozzle aligns about 3" from the machine's edge.
- 3. Place an empty cup under the filler nozzle spout.

- 4. On the LCD panel, access the PARAMETER SETTING screen from the top navigation bar.
- 5. If a password screen appears, clear the x's and type in six 8's, then enter.
- 6. Press the NEXT PAGE button at the top of the screen.
- 7. Select the SINGLE-FEED TEST button under the "Acceleration time" field.
- 8. Coffee will disperse into the cup.
- Weigh the total cup weight, subtracting the weight of the empty cup with a filter (typically 3 grams) to determine the amount of coffee dispersed.
- 10. Enter this weight into the "ACTUAL WEIGHT" field and press CALIBRATE WEIGHT.
- 11. Repeat this process three times to obtain an average.

IMPORTANT:

Coffee Grind

The manufacturer recommends a coffee grind of 800 microns for K-cups in this machine. This grind is optimal for coffee filled in standard K-cups. Coarser or finer coffee grinds may cause issues with coffee disbursement into the cup and may necessitate using a different filling auger.

Keep the Hopper Full

It's important to keep the hopper at least 80% full of product. Avoid letting this volume fall below 60%. This is due to the required pressure on the auger, which is needed to maintain the desired consistency in the cups as they fill.

Resetting the Machine

- The machine is designed to operate smoothly without applying force during automation. There will be times when a cup goes rogue in some fashion, and a possible jam may occur.
- 2. In the event of a jam with a faulty cup, lid, or other object, reset the machine.
- 3. There may also be an auger reset needed due to too high of resistance in the hopper.
- 4. Turn off the main power switch on the right-hand side of the machine.
- 5. Open the back of the machine to access the computer components.
- 6. Ensure all lights and digital readouts are turned off. It may take up to 10 seconds for all energy to be released, which is crucial for a complete reset.
- 7. Turn the main switch back on.
- 8. The system will be ready for operation.

MACHINE STARTUP

- 1. Ensure the machine is plugged in.
- 2. Verify that the air compressor is operational and connected.
- 3. Turn on the main switch to activate the machine.
- 4. Allow time for the lid sealing mechanism to heat up to its full temperature (190-200 degrees).
- 5. Load the hopper with coffee grounds.
- 6. Place K-cup lids into position.
- 7. Insert K-cups into the tube.
- 8. Position the capture bucket beneath the kick-out shoot.
- 9. Press the green start button to initiate the operation.
- 10. Verify smooth and efficient operation for clarity and cleanliness.

NOTE: During the initial operation, the lid-sealing heating unit may emit smoke for a few minutes. This is normal as residual machine oil from manufacturing burns off.

WARRANTY SUPPORT PROCEDURE

Since automated machines have many moving parts, support may be required. We understand the importance of keeping your machine running smoothly, so we've established a 4-level support system to ensure its continuous operation:

- 1) Level 1: CEPros
- 2) Level 2: North American Haitec representative
- 3) Level 3: Haitec manufacturer in China
- 4) Level 4: USA technician

Process

When you identify an issue you cannot remedy, please contact us at CEPros immediately to begin the support process. We are set up to handle most issues remotely and with video support as needed. WhatsApp mobile communication application will be needed. Please download and set up account with your cell number prior to appointment. Note that our first 3 support levels include virtual support at no charge. If a technician is needed on the ground, a fee for their labor (including related travel expenses) applies. (Reminder: Haitec's one-year warranty covers parts, not labor.) We have structured our support process so that, ideally, your issue can be solved without needing technician services.

- You can text or call Rick directly at 949-289-8083 or email at <u>rick@coffeeequipmentpros.com</u>. He will assist you through the situation, sometimes using video of the machine's issue that he may request you to provide with his guidance.
- If necessary, we will escalate to the next support level and involve our North American Haitec representative, who is located in the Central Time Zone, like us at CEPros.
- 3. In some cases, the North American representative may need assistance from our manufacturer's engineering team in China. Please note the 13-hour time difference. To escalate to this level of support, appointments need to be scheduled. Due to this time difference, these appointments are generally scheduled between 6 a.m. and 11 a.m. CST (primary window) or between 7 p.m. and 10 p.m. CST (backup window).
- 4. Automated packing machine technicians are available in the USA but rarely needed.
- 5. Finally, we can ship a needed part with expedited freight.