

KRAFFE

COFFEE ROASTERS

User Manual

- **KRF-02**

- **KRF-03**

- **KRF-05**

- **KRF-06**

- **KRF-10**

- **KRF-12**

- **KRF-15**

- **KRF-20**

Manual No. 155123 Revision A**Coffee Roasting Machine User Manual Sheet**

KRAFFE COFFEE ROASTERS

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INTRODUCTION

Welcome to the user manual for your coffee roasting machine!

The coffee industry is constantly evolving and everyone in the community is striving to serve the best cup of coffee to their customers. To achieve this goal, KRAFFE ROASTERS are designed with high-quality equipment that allows for a variety of coffee roasting profiles to achieve the specific flavor desired by each customer.

All KRAFFE ROASTERS models include standard features such as adjustable hot air circulation speed, drum speed, and flame level. Additionally, all equipment used in production is from worldwide trusted brands, ensuring that spare parts are readily available globally in case of any replacements. KRAFFE ROASTERS offer a wide range of capacities, from small coffee shops to large facilities, and can accommodate a variety of needs with models ranging from 0.5 kg to 240 kg batches. With KRAFFE ROASTERS, You can find the appropriate model that matches your needs within the KRAFFE ROASTERS product range.

This manual is designed to provide you with all of the information you need to use your machine safely and effectively. **We recommend that you read through this manual before using your machine for the first time, and refer back to it as needed whenever you have questions or need guidance.** In this manual, you will find information about how to set up and operate your machine, as well as important safety precautions and maintenance tips. We hope that this manual will help you get the most out of your coffee roasting machine and enjoy delicious, freshly roasted coffee.

Document Conventions

The following icons are used in this instruction manual.



NOTE. Notes emphasize additional information that may be useful to the reader.



CAUTION. Describes a situation or practice that requires operator attention or action in order to avoid undesirable outcomes.

1. BASIC SAFETY RULES



1.1. Risks

- Be careful to avoid touching hot surfaces while the machine is in use.
- Be aware of moving parts such as bearings, belts, and motors.
- Do not put your hands in any moving parts or the cooling tray while the machine is running.



1.2. Electrical and Gas Precautions

- Do not touch electrical components with wet hands.
- Do not use an extension cord to supply electricity.
- To prevent damage to electrical cables, avoid sharp corners and sharp turns.
- If the machine or electrical components are damaged, do not operate the machine and contact the supplier.
- Do not tamper with the electrical box without contacting the machine supplier.
- Gas connections and electrical connections should be made by authorized personnel.
- In case of a gas or electrical leak, stop the machine and contact authorized personnel.



1.3. Operation Precautions

- Do not use the machine in environments with explosive or flammable substances.
- Ensure that the machine is operating on a flat surface and properly aligned.
- Use the handles specified in the manual and do not use any other part of the machine to handle it.
- To turn off the machine, first turn off the computer and then the main switch (for automatic machines).
- Do not turn off the machine while the drum is hot, unless there is an emergency.



1.4. Installation Precautions

- Always fill the hopper with coffee beans before turning on the machine.
- Turn off the gas supply at the end of the operation day.
- Do not use the machine without a chimney installation.
- The machine requires fresh air to operate, so be sure to circulate the air in the room regularly.
- During maintenance and cleaning, make sure the electrical supply is off.
- If there are any issues, contact the service department.
- **Avoid sharp bends when installing any outlet pipes. It is recommended that the pipe have a gradual curve.**



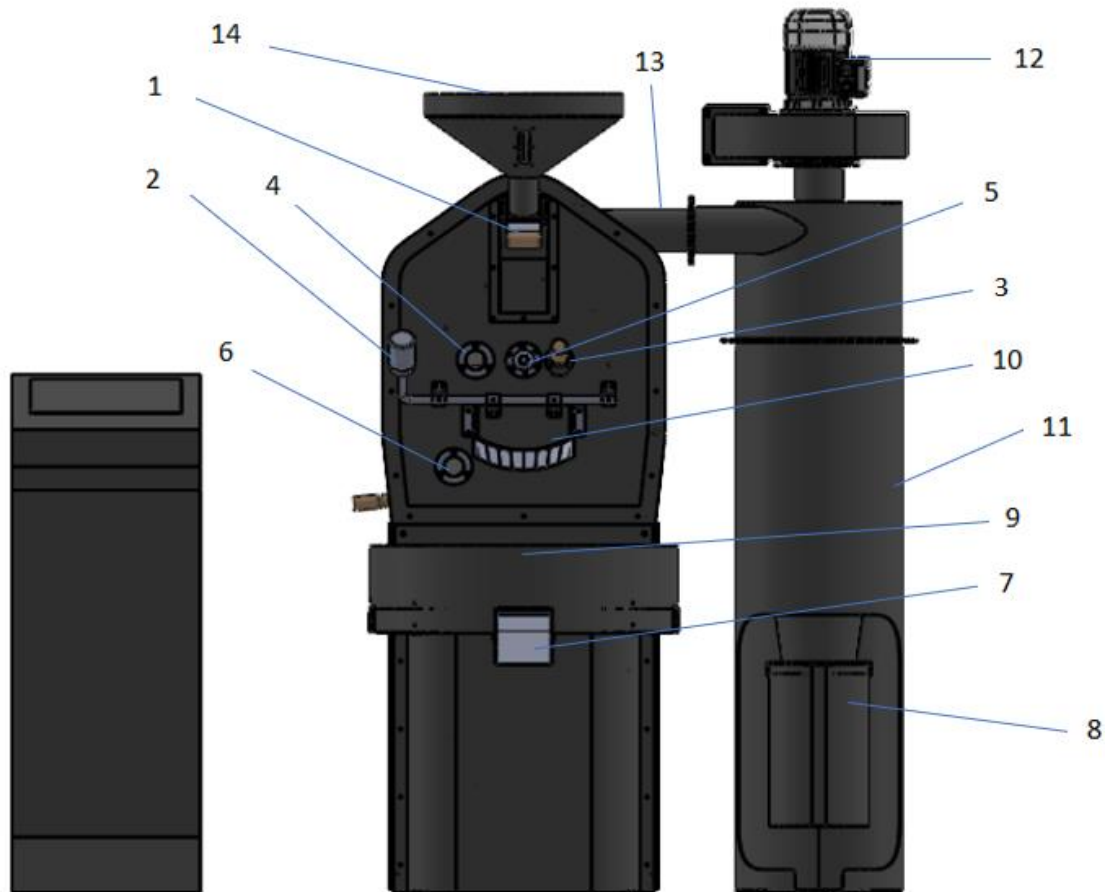
1.5. General Precautions

- Leave gas leak warning system on.
- Have a fire extinguisher readily available in the working area.
- Ensure ventilation is on before and after the roasting process.
- Keep the gas bottle outside of the working area (if using a gas bottle for fuel).
- Do not store flammable materials near the roaster.

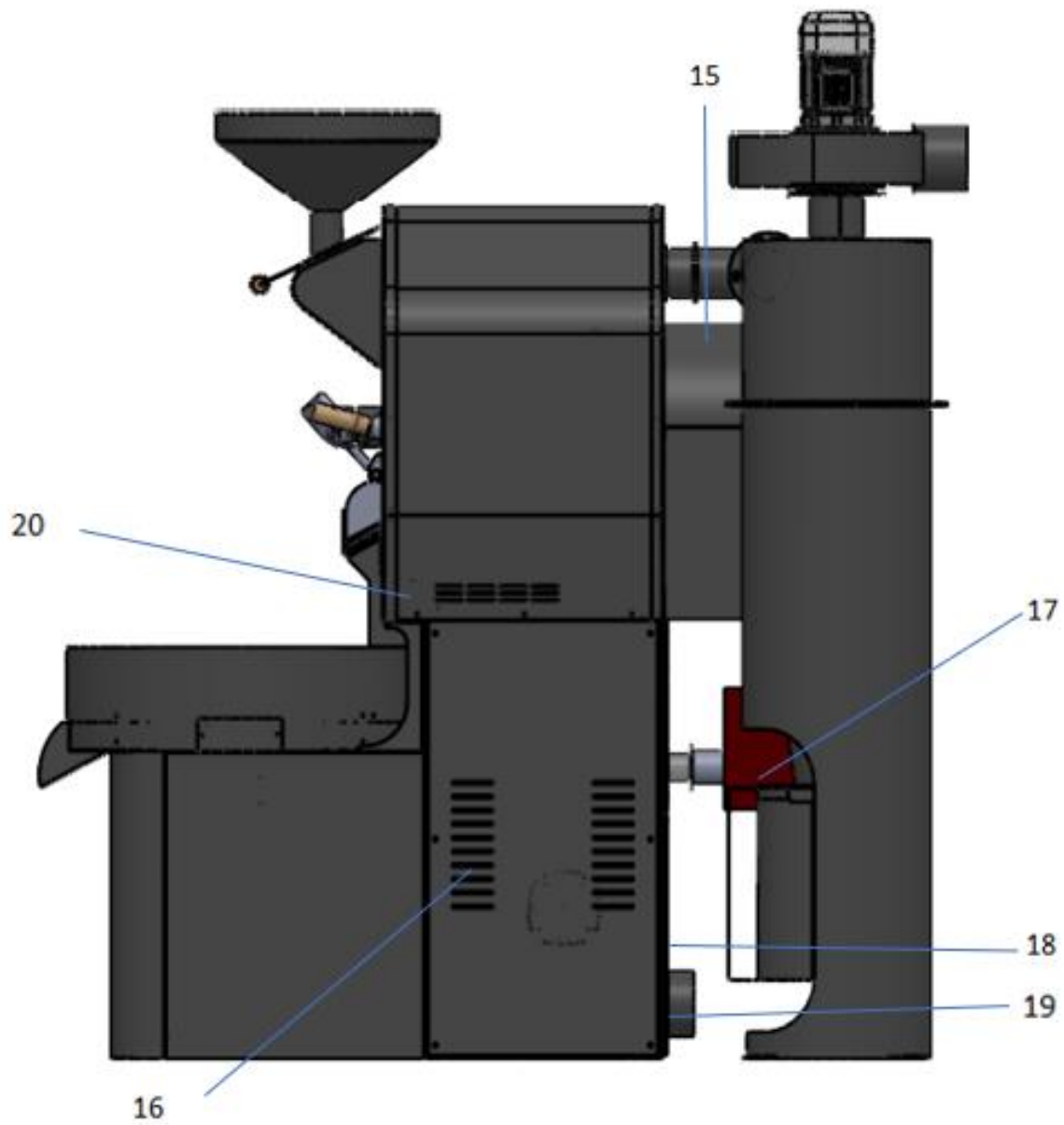
2. SPECIFICATIONS

Technical Explanations	KRF-02	KRF-03	KRF-06	KRF-10	KRF-15
Power Consumption	0.9 kW/h	1.2 kW/h	1.5 kW/h	2.5 kW/h	3 Kw/h
Current	2.3 Amper	3.1 Amper	6 Amper	9 Amper	9.5 Amper
Burner Capacity	28 kW	28 kW	28 kW	36 kW	50 kW
LPG Gas Consumption Max.	2,18 kg/h	2,18 kg/h	2,18 kg/h	2,71 kg/h	3,89 kg/h
LPG Gas Consumption Min.	0,31 kg/h	0,31 kg/h	0,31 kg/h	0,39 kg/h	0,54 kg/h
Natural Gas Consumption Max	2,92 m3/h	2,92 m3/h	2,92 m3/h	3,64 m3/h	5,21 m3/h
Natural Gas Consumption Min	0,42 m3/h	0,42 m3/h	0,42 m3/h	0,52 m3/h	0,73 m3/h
Minimum Batch Capacity	250 gr.	1 kg.	2 kg.	3 kg.	5 kg.
Maximum Batch Capacity	2 kg.	3 kg.	6 kg.	10 kg.	15kg.
Roasting Time	7-13 minutes	8-15 minutes	8-15 minutes	8-15 minutes	8-15 minutes
Cooling Time	2-4 minutes	2-4 minutes	2-4 minutes	2-4 minutes	2-4 minutes
Artisan & Cropster	Compatible	Compatible	Compatible	Compatible	Compatible
Exhaust Chimney Diameter	100mm	100mm	120mm	120mm	120mm
Cooler Chimney Diameter	100mm	100mm	120mm	140mm	140mm
Width	850mm	827mm	1200mm	1200mm	1300mm
Height	1360mm	1520mm	1985mm	2050mm	2050mm
Length	1195mm	1250mm	1747mm	2000mm	2135mm

3. ROASTER'S PARTS



- | | |
|-----------------------|-----------------------|
| 1. Hopper Lever | 8. Chaff Collector |
| 2. Drum Door Lever | 9. Cooling Mixer |
| 3. Sample Spoon | 10. Drum Door |
| 4. Sample Window | 11. Cyclone |
| 5. Front Bearing | 12. Exhaust Fan Motor |
| 6. Burner Window | 13. Exhaust Pipe |
| 7. Cooling Tray Lever | 14. Hopper |



- 15. Drum Motor Cover
- 16. Ventilating Opening
- 17. Premix Burner
- 18. Socket 1
- 19. Socket 2
- 20. Drawer

4. INSTALLATION

Before beginning the installation process, make sure to read the entire manual. The installation and first start-up of the machine should be done by a skilled person. KRAFFE ROASTERS will not be held responsible for any damage or loss if the installation is not performed by a skilled person.

4.1. Mechanical Parts Installation

- All KRAFFE ROASTERS are thoroughly tested before shipping and may have some parts that need to be reassembled on site.
- Connect the chaff collector directly to the exhaust fan pipe, or use a suitable pipe to connect it to the exhaust pipe if necessary.
- Attach the electrical box cables to the cable sockets on the main body of the machine.

4.2. Gas Installation

- The gas installation must be performed by a skilled technical personnel.
- Check that the gas regulator is suitable for your gas supply settings.
- Burners are capable of working with Natural Gas and LPG. Fuel type is set according to the pre-instructions given by the customer. In order to change the gas type, please contact to the supplier.
- The gas pressure must be at least 21mbar.

4.3. Electrical Installation

- The electrical installation must be performed by a skilled technical personnel.



- **Make sure that the electrical supply at your facility meets the requirements of the machine.**
- There are different electrical supply requirements for different countries (100/110/208/220/380 V, 50/60 Hz, single-/three-phase). Check the electrical specifications for your machine and ensure that the electrical supply meets these requirements.

4.4. General Key Issues During Installation

- Make sure that the chimney exit is well protected from rain, snow, and other substances.
- Make sure that there is no blocking substance in exhaust chimney. For windy regions, make appropriate adjustments on your chimney in order to avoid wind blockage on the exhaust.
- It is recommended that the chimney exit is equipped with a regular filter.
- All exhaust air connections should be well insulated.
- The chimney pipes should not be smaller in diameter than the machine's exhaust outlet.
- Adjust the chimney height as necessary for proper exhaust. An additional exhaust fan may be needed if the chimney is not adjusted accordingly.
- Ensure that there are no obstacles within a radius of 50 cm from the machine.
- Avoid sharp turns near the main exhaust.



- **If the exhaust and cooling outlet will be connected to the same chimney, do not connect them at a 90-degree angle.**
- It is strongly recommended that the exhaust chimney system is designed by an expert.
- Before starting the machine for the first time, turn on the main fuses in the electrical box.
- If you plan to change the fuel supply of the machine, contact the technical department beforehand.

5. CALIBRATIONS

5.1. Burner Adjustment



- To increase the maximum capacity of the premix burner, set the burner to 100% and use an Allen key with a hex size of 4 mm to turn "1" counterclockwise (first adjust the maximum, then the minimum).
- To decrease the minimum capacity of the premix burner, set the burner to 0% and turn "2" counterclockwise.

5.2 Drum Gap Calibration

The gap between the drum and the front cover is critical. If it is too wide, beans may fall out and if it is too narrow, the drum may scrape against the front cover. The gap may need to be recalibrated due to changes in temperature during machine operation.



The gap can be calibrated using the drum position regulator located on the front of the machine. The regulator has two holes: one for the **‘locking ring’** and one for the **‘bearing housing’**.

- The gap should be adjusted while the machine is hot and empty. The minimum temperature required for this adjustment is the recommended roasting temperature.
- Use the wrench and Allen key provided with the machine to loosen the drum position regulator by loosening the nuts in the locking ring hole.
- After loosening the ring, use the wrench to adjust the main body of the drum position regulator according to the desired gap. Turning the regulator clockwise increases the gap and turning it counterclockwise reduces the gap.
- The recommended gap value is 1mm.
- Once the gap has been adjusted, use the Allen key to tighten the locking ring.

6. MAINTENANCE AND CLEANING

It is recommended to perform general maintenance on the machine at least once per year. You can contact an authorized service provider for annual maintenance. You can also contact the technical department for annual maintenance.

- Make sure to turn off the machine before cleaning the outer cover and to turn off the gas and electrical supplies during maintenance and cleaning.
- Use a cloth and a small amount of alcohol to clean the machine. Do not use any chemicals that may be harmful to human health (such as gasoline, fuel, or oil) and do not wash the machine with water. Instead, use a wet cloth and dry the machine thoroughly afterwards.
- Using non-company manufactured spare parts can void the warranty.
- The drum gap may need to be calibrated periodically. The recommended drum gap is 1mm.

ACTION	MAINTENANCE	PERIOD
Gas System Check	Checking for leakage looking through all connections	Each day of roasting before starting the first roast
Front Bearing Oil Check	Remove the cover using the Allen key. Check the grease oil level of the bearing. If the oil is dry or not enough, lubricate the bearing.	Once every 6 months
Screws and Bolts Check	Can be done by controlling each screw and bolt on the roaster.	Once in a year
Back Bearing Oil Check	Connect the pump to lubrication inlet and pump the lubricant 3-4 times.	Once a year
Cyclone Chaff Collector Cleaning	Can be done with brush and pressurized air.	Once every 10 cycles
Cooling Tray Cleaning	Can be done with a brush and pressurized air.	Once every 50 cycles
Exhaust Fan Removal Cleaning	Can be done with a brush and pressurized air after removing the fan and motor with the wrench and the Allen key.	3 to 6 months depending on usage
Exhaust Fan Pipe and Inner Parts	Can be done with a cylinder cleaning pipe brush and pressurized air.	3 to 6 months depending on usage
Temperature gauge cleaning	Can be done with a cloth material to remove the accumulated dirt layer.	3 to 6 months depending on usage
Sight Glass Cleaning	Can be done with a cloth material to remove the accumulated dirt layer	3 months is recommended,
Lubrication of the Back Bearing and Chains	Can be done by removing the old grease and applying new grease to the front bearing, chains, and rear bearing need for different model of grease.	3 to 6 months depending on usage
Premix Burner Cleaning	Can be done using pressurized air on the burner located inside the roaster.	3 months is recommended
Cooling Fan Removal and Cleaning	Can be done with a brush and pressurized air after removing the fan and motor with the wrench and the Allen key.	6 months to 1 year depending on usage

7. TROUBLESHOOTING

PROBLEM	POSSIBLE REASON	SOLUTION
Noise in the drum	Wrong adjustment of the drum position	Adjust the drum position
	Not enough lubricant in the bearings	Lubricate the bearings
Coffee bean is coming out of the chaff drawer	Wrong adjustment of the drum gap	Adjust the drum gap
Roasting time is too long	Hopper clap may be open	Close the hopper clap
	Exhaust pipe and fan are dirty	Clean the exhaust pipe and fan
	Exhaust fan speed is too high	Reduce the exhaust fan speed
Mixer is not rotating	Mixer fuse may be blown	Check the mixer fuse
	Mixer arm may be loose	Tighten the mixer arm
Roasting process is not starting	Machine is on alarm position	Reset the alarm and restart
	Malfunction in electrical components	Check the electrical components
	Gas pressure is too low	Check the gas pressure, set an appropriate pressure value if necessary
Drum motor is not working	Drum motor is on alarm	Check the voltage, contactors and thermal relays. If contactors or thermal relays are off, turn them on. If the problem continues, contact our technical department.
Exhaust fan is not working	Exhaust fan motor is on alarm	Check the voltage, contactors and thermal relays. If contactors or thermal relays are off, turn them on. If the problem continues, contact our technical department.

Cooling time is too long	Cooling fan pipes are dirty	Clean the cooling fan pipes
	Cooling fan is dirty	Clean the cooling fan
	Cooling tray is dirty	Clean the cooling tray
Burner starts but fades away after a while	Gas pressure is low	Gas pressure must be at least 21 mBars at the inlet of the roaster. Check the pressure with the help of a manometer and regulator.
	Plug may be inserted into the opposite socket (in 220V machines)	Check the plug
	Ionization rod position is wrong	Make sure that it is on the burner and in contact with fire
	Grounding is not sufficient	Check the grounding
	Ignitor is oxidized	Clean the ignitor
Difficulty when igniting the burner	There is more than one regulator in the system	There must be only one regulator connected to system.
	Capacity of the regulator is not enough	Check the regulator and use an appropriate regulator
	Gas pressure is too low	Gas pressure must be at least 21 mBars at the inlet of the roaster. Check the pressure with the help of a manometer and regulator.

8. COMPUTER CONNECTION

Cropster Roasting Intelligence have set-up batches for KRAFFE ROASTERS.

For Artisan set-up please contact to the supplier.

If you encounter any other issues, contact the supplier.