

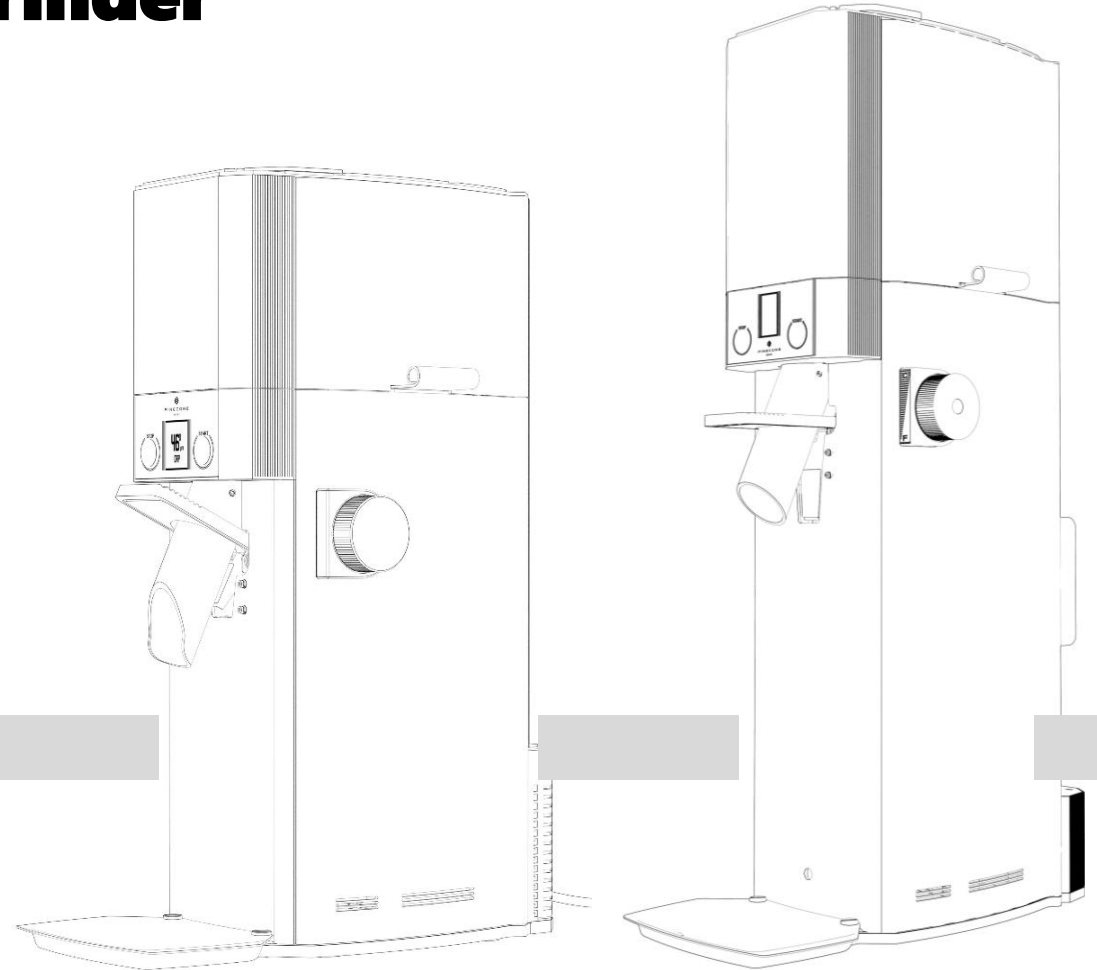
PINECONE FOXTAIL & SIBERIAN

Commercial coffee grinder

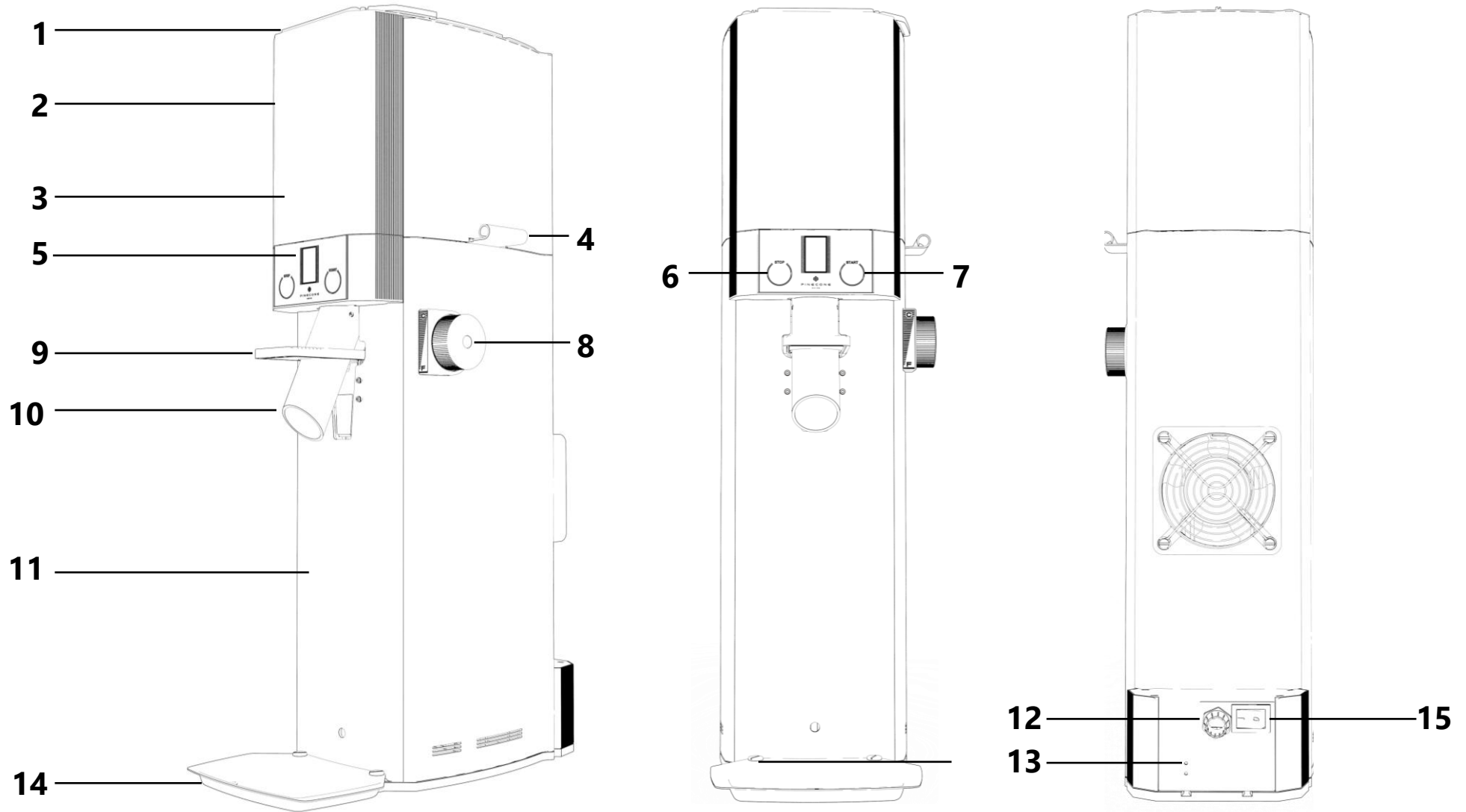
User manual

English

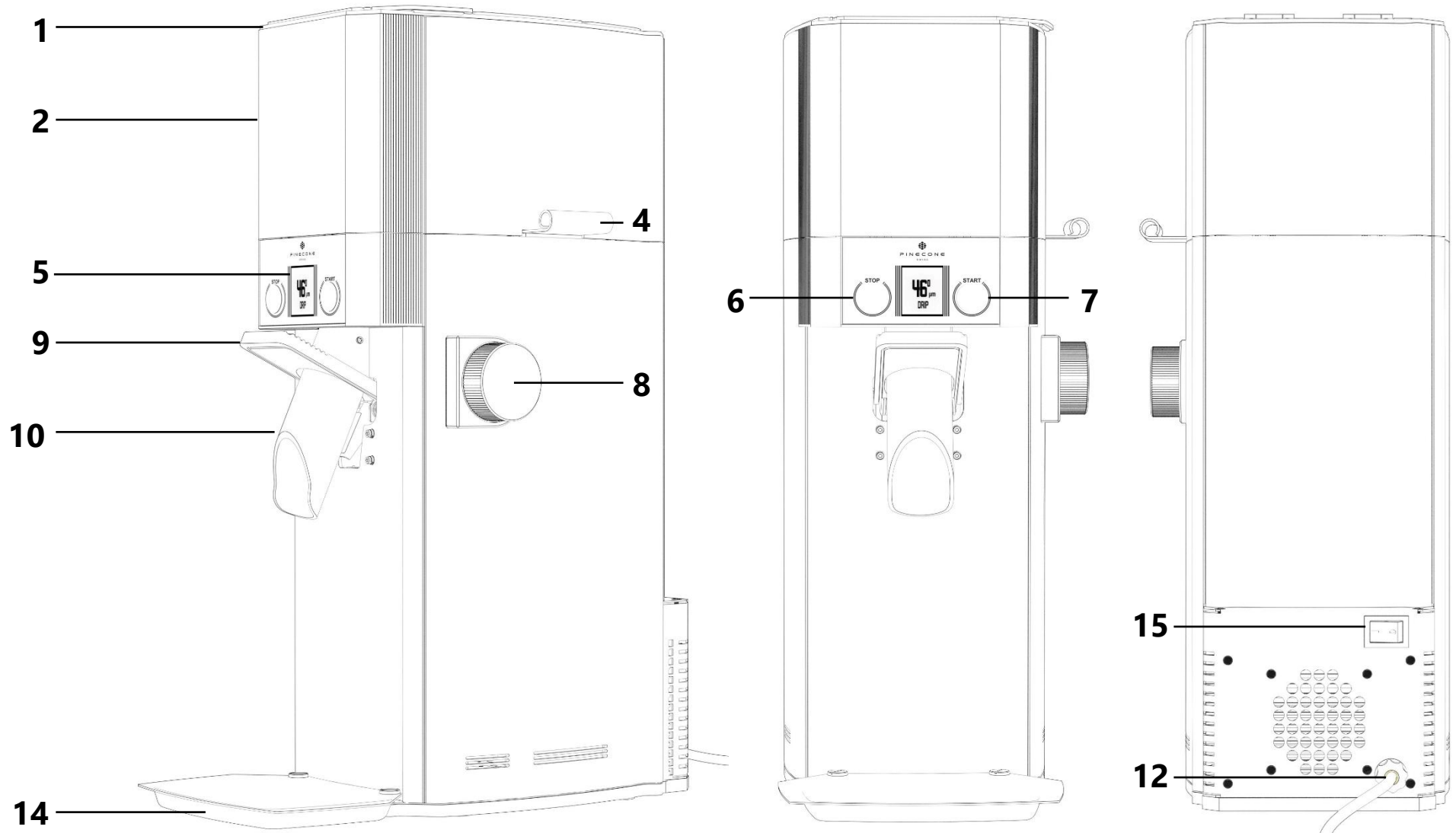

PINECONE
SWISS



Overview Foxtail



Overview Siberian



Delivery scope

1. Bean hopper lid
2. Bean hopper
3. Recipe sticker (only Foxtail)
4. Bean hopper slider
5. Display
6. STOP-Button
7. START-Button
8. Grind size adjustment knob
9. Spout knocker
10. Spout pipe
11. Vibrating plate (only Foxtail)
12. Power cable
13. Overcurrent protector (only Foxtail)
14. Drip tray
15. Main switch

Contents

General information	6	Maintenance	18
Reading and retaining the instruction manual	6	Troubleshooting	19-20
Glossary and explanation of symbols in the instruction manual	6	Siberian error codes	21
Safety	7	Technical data	22
Intended use	7	Disposal	23
Safety information	8-9	Support & Service	23
Before initial operation	10		
Functioning and basic settings	10		
Validating the grinder and scope of delivery	10		
Setting up the grinder and inserting the bean hopper	11		
Setting up the portafilter	11		
Operation	12		
Filling the hopper with coffee beans	12		
Connecting the grinder to a 3-phase power supply	12		
Setting and changing the grind size	12		
Starting the grinding process	13		
Changing coffee beans	14		
Cleaning	15		
Cleaning the grinder installation surface	15		
Cleaning the grinder auxiliary components	16		
Cleaning the bean hopper	17		
Cleaning the grinding mechanism with GRINDZ	17		

General information

Reading and retaining the instruction manual

Carefully read this instruction manual and safety information before using the described coffee grinders to ensure safe operation without danger. This manual applies standards and regulations in force in the European Union. Consultation of specific country laws and guidelines if abroad remain in the responsibility of the user.

The Foxtail and Siberian coffee grinders will hereafter be referred to only as “grinder” for simplicity. Keep this instruction manual for future reference and pass it on to subsequent owners and users of these grinders.

Glossary and explanation of symbols in the instruction manual



WARNING! Hazard of medium risk which can lead to death or serious injury if not avoided.



CAUTION! Hazard of low risk which can lead to death or serious injury if not avoided.



WARNING!
Electrical shock hazard



Note!
Material damage possible



Important information for operation & handling



Product is permitted for indoor use only



Mark to indicate a product that meets the electrical safety requirements in the United States of America.



Mark to indicate a product that meets the hygiene and cleanliness requirements in the food industry defined by the National Sanitation Foundation.



Mark to declare product conformity to applicable provisions of the European Economic Area.



Mark to declare product conformity to protection class I.

Safety

Intended use

The grinder is only suitable to grind whole roasted coffee beans. Do not use the grinder to grind other substances or objects.

The grinder is intended for commercial use but not for continuous mass production. Servicing the grinder is permitted exclusively for trained personnel. Operation by untrained persons is permitted in a place where its use is supervised.

Any other use is considered out of compliance with intended use and may result in material damage or personal injury.

Do not alter the grinder in any way. The manufacturer or supplier cannot be held liable for damages or any injuries resulting from failure to comply with safety instructions.

Safety information.



WARNING!

Danger of electric shock (1/2)

Improper use, incorrect electrical installation or excessively high voltage can lead to electric shock. Therefore:

- Connect the grinder only if the mains voltage of the socket complies with the information indicated on the type plate.
- Connect the grinder only to a socket with good accessibility so that it can be quickly disconnected in the event of a fault.
- Do not use the grinder if you notice any damage or if the power cable or plug is faulty. A damaged cable or plug must be replaced by the manufacturer or by qualified service personnel in order to avoid hazards.
- Do not operate the grinder without an earth connection.
- Connect the grinder only if the power supply is secured with a 16 A slow fuse or 15 A overload protection (USA). Only qualified electricians may install protective measures if the power connection at the site of use is not yet secured in this way.

Safety



WARNING!

Danger of electric shock (2/2)

- Install the grinder only in places where handling & operation of the grinder can be supervised by trained personnel.
- Do not operate the grinder above 2,000 meters.
- Do not immerse the grinder or the power cable or power plug in water or any other liquids.
- Do not clean the grinder with a water jet or with compressed air (e.g. with a compressed air gun).
- Never touch the power plug with wet hands.
- Never unplug the power plug from the wall socket by pulling on the power cable; always grip the plug itself.
- Never use the power cable as a handle to carry the grinder.
- Keep the grinder and power cable/power plug away from open flames and hot surfaces.
- Position the power cable in a way so that it does not become a trip hazard.
- Do not bend the power cable and do not place it over sharp edges.
- Use the grinder in indoor areas only. Never operate the grinder in damp rooms or in the rain.
- Keep children away from the grinder and ensure that children do not insert any objects into the grinder.
- If you are not using the grinder, if you are cleaning it or if a fault occurs: switch off the grinder and remove the power plug from the socket.
- Do not open the grinder casing and delegate repairs and service to trained service personnel.
- All liability and warranty claims will be rejected and excluded in the event of unauthorized repairs, faulty power connection or incorrect grinder operation.
- Only original equipment manufacturer parts that comply with the original appliance specifications may be used for repairs and service. This grinder contains electrical and mechanical parts that are essential for protection against potential hazards

Safety



WARNING! Danger for children and persons with reduced physical, sensory or mental capabilities (e.g. partially disabled or elderly persons) or a lack of experience or knowledge (e.g. older children or inexperienced users)

- The grinder is not intended for use by children or people with limited physical, sensory or mental abilities or a lack of experience and knowledge. Children may not play with the grinder.
- Do not leave the grinder unsupervised when in operation.
- Do not let children play with packaging film. Children can become entangled in it while playing and may suffocate.
- Do not let children play with the small parts. These can be life-threatening if swallowed.



CAUTION!
Risk of tipping and injury

- Incorrect handling of the grinder can result in injury.
- Position the power cable so that persons cannot become entangled and cause the grinder to fall over.
- Place the grinder on a level and stable surface to prevent it from falling over.

Before initial operation

Functioning and basic settings

The Foxtail grinder requires 3-phase power supply. The Siberian grinder operates on single phase power supply. Ensure a properly secured and grounded supply socket is available and consult a certified electrician if it is not.

The grinders are designed to grind into bags but may also be used to grind into other containers if these can be secured safely while grinding. The grinder is powered as soon as its power cord (12) is connected to a suitable power supply and the main switch (15) is set to "I" position. Grinding operation is controlled by the START-button (7) and STOP-button (6) located on the front of the grinder body.

The Foxtail and Siberian are controlled by software. The software is controlled by the adjustment knob (8, turn to toggle; push to enter) and the STOP-Button (6, push to move back). As long as a menu is active on the display (5), the grinder will not start. Start condition is indicated by the green illumination of the START-button (7).

Both grinders apply the same modular design to ease maintenance and service to optimize machine uptime. It is possible to remove and replace the grinding module assembly including discs and flapper rather than replacing single components. The same applies to the electric module that houses all switching and other electric components that experience wear.

Validating the grinder and scope of delivery


- ! **Note! Risk of damage!** Take care while opening the grinder packaging with a sharp knife or other pointed objects, otherwise the grinder may be damaged.
- - Remove the grinder from its packaging & validate that the delivery scope is complete (see p.3)
 - Check for damage to the grinder or to its individual parts: if damage is detectable, do not use the grinder and contact your supplier.
- i **Information:** please note that each grinder is subjected to a function test before delivery and that residues of coffee powder may be present in the grinding chamber

Before initial operation

Setting up the grinder

1. Place the grinder on a level and stable surface.
2. Install the bean hopper (2) by securing it onto the top of the grinder body with the provided screws. Ensure that enough space is available on the right side of the grinder for the bean hopper slider (4) to open completely.
3. Insert the drip tray (14) into the corresponding housing recess on the bottom of the front panel and secure it in place with the provided screws.
4. Ensure the spout pipe (10) is securely fastened in place and that the spout knocker (9) can move freely.
5. Connect the grinder power cord (12) to a suitable, secured and grounded power supply.
6. Set the grinder main switch (15) to "I"-position to power on.
7. Before introducing beans: open the bean hopper slider (4), push the START-Button (7) and look down into the grinding house to verify the grinder is turning clockwise. If not, push the STOP-button (6), set the main switch (15) to "0-position" and ensure the power supply is properly wired (specifically for 3-phase Foxtail).
8. When grinding into bags, take care to select a bag size of sufficient size to prevent the spout pipe (10) from reaching far into the coffee bag / to prevent the spout pipe from interfering with accumulating coffee inside of the bag.

 **Information:** the grinder switches off automatically if the bean hopper is not attached

 **WARNING! Danger of electric shock!** Ensure a properly secured and grounded power supply socket is available at your location and consult a certified electrician if it is not available.

Operation

- ! **Note! Risk of overheating!** Exceeding the maximum permissible operating cycle can cause the grinder to overheat.
- Do not exceed the maximum operating cycle and observe recommended pauses when the maximum operating cycle is reached (see chapter “Technical Data”).

i Information

- The Foxtail grinder applies a thermal overcurrent circuit breaker (13) that interrupts the grinder's circuit in the event of an electrical overload. To start the grinder again after the circuit breaker released, unplug the main power cord (12) from its power supply and press in the circuit breaker release button (13) on the backside of the grinder. You can now plug the main power cord (12) back into its power supply and restart grinding operation.
- Both Foxtail and Siberian grinders also apply a motor protector, which switches off the grinder when the motor becomes too hot. As soon as the motor has cooled down, the grinder can be put into operation again.

- ! **Note! Risk of damage!** The operator has no influence on the thermal overcurrent circuit breaker. If the circuit breaker trips several times, it is essential to consult an authorized service partner as the motor may be damaged.

Filling the hopper with coffee beans

1. Remove the lid (1) from the bean hopper (2)
2. Fill the bean hopper with whole roasted coffee beans. The maximum filling level should be approximately 1 cm below the top edge of the bean hopper (2).
3. Reinstall the lid (1) onto the bean hopper (2).
4. Ensure a bag is secured onto the spout pipe (10) with the spout knocker (9) and that the bean hopper slider (4) is opened to ensure proper grinding operation.

Connecting the grinder to a power supply

Plug in the power cord (12) into a properly installed contact socket and set the grinder main switch (15) to “I”-position.

Operation

Setting and changing the grind size

1. Turn the grind size adjustment knob (8) until the desired setting is displayed on the screen (5).
2. Press the adjustment knob (8) to confirm the desired setting and allow the grinder to electronically adjust the grind size. The grind setting can only be changed while the grinder is not running.
3. If the grind size adjustment exceeds 150 microns, the grinder will prompt you to confirm that the grinding chamber is empty. Press “YES” only if the chamber is completely **free** of beans to avoid damage to the adjustment mechanism. If there are still coffee beans in the grinding chamber, press “NO,” close the beans door (4), grind until the chamber is empty, then set the desired grind size again and press “YES” once the chamber is empty.
4. During adjustment, the grinder will not operate and will not respond to any commands until it has finished adjusting. The green illumination around the START button (7) will switch off, and a red exclamation mark will be displayed until the desired grind setting is reached.



WARNING! Reducing the size adjustment from coarse to fine while there are coffee beans in the grinding chamber can cause damage to the size adjustment mechanism.

Information

- The grind setting can only be changed while the grinder is not running.
- To avoid imbalances when adjusting grind size it is recommended to first set a coarser grind size size (about one scale value above the desired value) and only then adjust the grinding size finer to the desired value
- The grind size value shown on the screen (11) is measured in microns and indicates the distance between the grinding burrs.

Starting the grinding process

Operate the grinder via the STOP-button (6) and START-button (7).

Operation

Changing coffee beans

1. Close the bean hopper slider (4) by pulling it out of the bean hopper (2) to prevent further beans from entering the grinding chamber.
2. Operate the grinding process by pushing the START-button (7) until the grinding chamber runs empty. Push the STOP-button (6) once the grinder is idling.
3. Open the hopper lid (1)
4. Remove all remaining coffee beans from inside of the bean hopper (2) and temporarily transfer them to another container.
5. Clean the inside of the hopper if necessary.
6. Refill the bean hopper with new whole roasted coffee beans.
7. Close the hopper lid (1).
8. Push the bean hopper slider (4).
9. Grind a few seconds to remove any residues of the previous coffee beans.

Cleaning



CAUTION!

Risk of injury! The grinder may tip over and cause injury when moved.

- Always place the grinder on a stable surface that is safe from tipping over before cleaning.
- Consult for help if the grinder is too heavy or bulky to move alone.



CAUTION!

Risk of injury and danger of short circuit from water entering the grinder!

- Never immerse the grinder in water or other liquids for cleaning
- Never clean the grinder using a water jet or other water propulsion tools
- Ensure that no water or other liquids enter the grinder body casing



Note! Risk of damage!

Improper handling may cause damage to the grinder

- Do not use any harsh cleaning products or sharp or metallic cleaning objects such as knives, metal scouring pads or similar. These can scratch the surface of the grinder.
- Do not clean the grinder with compressed air (e.g. with a compressed air gun).
- Do not put the drip tray or the lid of the bean container into the dishwasher. The parts are not suitable for dishwashers and may be damaged.
- Do not lift the grinder by the bean hopper; lift only by the casing and always with both hands.

Cleaning

Cleaning the grinder installation surface

1. Set the grinder main switch to "0"-position (15) and remove the grinder's power cord (12) from its supply socket.
2. Lift the grinder by its body casing using both hands and place it on a stable and clean surface.
3. Clean the installation surface and the underside of the grinder with a damp cloth and dry the surfaces (surfaces must be dry and free of oil and grease).
4. Place the grinder back on the cleaned surface and ensure steps 1-6 of chapter "setting up the grinder" are followed before resuming grinding operations.

Cleaning the grinder auxiliary components

1. Set the grinder main switch to "0"-position (15) and remove the grinder's power cord (12) from its supply socket.
2. Use a brush to clean the following grinder components:
 1. the spout pipe (10),
 2. the spout knocker (9),
 3. the vibrating plate (11, only Foxtail)
3. Remove the drip tray (14) from its fixation.
4. Use a damp cloth to wipe down the casing and the drip tray as required, but at least once a week.
5. Re-attach all parts removed for cleaning and ensure steps 1-6 of chapter "setting up the grinder" are followed before resuming grinding operations.

Cleaning

Cleaning the bean hopper

1. Close the bean hopper slider (4) by pushing it into the bean hopper (2) to prevent further beans from entering the grinding chamber.
2. Operate the grinding process by pushing the START-button (7) until the grinding chamber runs empty. Push the STOP-button (6) once the grinder is idling.
3. Set the grinder main switch to "0"-position (15) and remove the grinder's power cord (12) from its supply socket.
4. Remove the hopper lid (1)
5. Remove all remaining coffee beans from inside of the bean hopper (2) and temporarily transfer them to another container.
6. Use a damp cloth to clean the inside and outside of the bean hopper and allow it to dry.
7. Refill the bean hopper with new whole roasted coffee beans.
8. Re-attach all parts removed for cleaning and ensure steps 1-6 of chapter "setting up the grinder" are followed before resuming grinding operations.
9. Grind a few seconds to remove any residues of the previous coffee beans.

Cleaning the grinding mechanism with GRINDZ™

Information

- The manufacturer recommends the use of Urnex GRINDZ™ grinder cleaner.
- More information on how to use GRINDZ™ to clean your grinder is available at www.urnex.com and on YouTube: www.youtube.com/watch?v=7sNRzQqfSzc.
- The grinder requires cleaning every 1-2 weeks for best taste and operation.

Maintenance

i Information

- The grinding module should be serviced or replaced after grinding ~15-20 tons of whole roasted coffee beans. The volume until replacement depends on grind size, roast degree, bean type and condition of the module.
- The grinding module includes all components that experience significant wear: grinding discs, flapper and grinding house. Changing the aforementioned separately is not recommended.
- Wear gloves when changing the grinding discs to avoid injury.
- Recalibrate your grind size after replacing or changing the grinding module.

Replacing the grinding module

1. Empty the grinder (see chapter "Cleaning the bean hopper", steps 1–4) and remove the bean hopper (2) from the grinder housing by unscrewing the fixation screws on the bottom of the hopper that fix onto the grinding module.
2. Unscrew the grinding module fixation screws on the bottom fixation plate that fix it to the motor plate holder.
3. Carefully lift out the grinding module towards the top.
4. Select your new grinding module and re-install it onto the motor plate holder. Ensure that the coupling connecting the motor shaft to the grinding module safely locks and that all fixation screws on the bottom of the module are tightened.
5. Re-install the bean hopper (2) on top of the grinding module and ensure that all fixation screws on the bottom of the hopper assembly are tightened.
6. Ensure steps 1-6 of chapter "setting up the grinder" are followed before resuming grinding operations.

i Information

- Please contact your service partner for a detailed „how-to“ document on grinding module service
- Please contact your service partner to replace the electrical module.

Troubleshooting

Problem	Possible cause	Remedy
The grinder is not grinding	The power plug is not plugged into a socket.	Insert the power plug into a properly installed socket.
	The bean hopper is not installed.	Install the bean hopper (see chapter on "Setting up the grinder").
	The overcurrent protection switch triggered.	Check whether the release button of the circuit breaker engage. Push it back in if necessary. Contact your service partner if the circuit breaker pops out repeatedly.
	The electrical fuse tripped.	Check the electrical fuse. If required, restore the fuse to its original state or replace it. Check whether other loads are connected to this fuse and if so, pull out their plugs. Contact your service partner if the fuse repeatedly trips.
	The motor temperature internal fuse tripped.	Disconnect main power socket and wait for 30-60 minutes to let the motor cool down. After waiting connect the main power plug and restart the grinder.
	Software issue.	Check page 20-22 for troubleshooting.
The grinder is making noise but not grinding.	Motor driver issue.	Check page 23 for troubleshooting.
	The grinding mechanism is clogged.	Set the grinding degree to coarsest position "8" or "850 microns". Start the grinding process. The grinder will clear itself. Then re-set the grinding degree setting to the desired position.
	Coffee has backed up into the grinder due to over-dosing in the portafilter	Clean the spout. Set the grinding degree to coarsest position "8" or "850 microns". Start the grinding process. The grinder will clear itself. Then re-set the grinding degree setting to the desired position
	A foreign object entered into the grinding mechanism.	Clean the grinding mechanism as described in the chapter on "Cleaning" and remove the foreign object in the process. If the foreign object cannot be removed, contact your service partner.

Troubleshooting

Problem	Possible cause	Remedy
The grinder is not grinding fine enough.	The grinding module reached end of life or need calibration.	Replace the grinding module or adjust the grind size to a finer setting.
The grinder does not grind continuously / it stops grinding intermittently.	The STOP- and START-buttons or switching components may be damaged.	Contact your service partner.
The bean hopper cannot be installed.	There are coffee beans in the hopper intake.	Remove all coffee beans from the hopper intake.

Software error codes

Error codes are indicated on the operating screen by a large red exclamation mark and remain visible until a reset has been performed. During this time, the grinder will not operate and will not respond to any commands.

Resetting error codes:

1. (R1) Press the **START** and **STOP** buttons simultaneously.
2. (R2) Switch off the main switch or Disconnect the main power cable, wait 15 seconds, then restart/reconnect it.

Error codes

Error code	Fault	Cause	Remedy	Remarks
Error 10	Hardware initialization error	One or more peripheral devices failed to be recognized	R2 If the issue persists after a few attempts, contact your local supplier.	Check the grinding module connectors.
Error 11 or Error 15	Hall sensor did not detect a signal during calibration (in or out).	During calibration, the magnet was not detected.	R1 R2 If the issue persists after a few attempts, contact your local supplier.	Check magnet presence. Check magnet to sensor height
Error 12	A2D (analog-to-digital) component failure detected.	No signal received from the positioning potentiometer.	R2	Check the potentiometer board cables and replace the board if necessary.
Error 13	Servo motor blocked	No movement detected from servo motor	R2	Check servo belt Check servo gear Check motor cable
Error 16	Missing offset value		Contact your local supplier to set the offset.	Insert password



CAUTION!

- The remarks column is intended for trained personnel only and must not be used without consulting the manufacturer.
- If any of the issues listed above persist after a few attempts to perform the recommended remedies, contact your local supplier.

Error codes

Error code	Fault	Cause	Remedy	Remarks
Error 23	Servo motor blocked	No movement detected from the servo motor	Cleaning the grinding chamber Replacing module	Check servo belt Check servo gear Check motor wires
Error 24	Servo target failed	During calibration, the target value could not be reached.	Cleaning the grinding chamber Replacing module	Check if beans inside the chamber Check servo belt Check servo gear Check motor wires
Error 41	Communication error	MCU-BLDC motor driver communication error.	R1 R2 Replace communication board	Contact your local supplier to replace the communication board.
Error 42	No status reply	Driver fail to answer status	R1 R2 Replace communication board	Contact your local supplier to replace the communication board.



CAUTION!

- The remarks column is intended for trained personnel only and must not be used without consulting the manufacturer.
- If any of the issues listed above persist after a few attempts to perform the recommended remedies, contact your local supplier.

Error codes

Error code	Fault	Cause	Remedy	Remarks
Error 40 + XX	BLDC motor driver error	BLDC driver limit reached	R2	See below for an explanation of the "xx" value.

110V

XX	Fault
0	Stalled motor
1	Over current
2	Abnormal hall sensor behavior
3	Bus voltage too low
4	Bus voltage too high
5	Peak current alarm
6	Temperature alarm
7	Reserve

220V

XX	Fault
1	Stalled motor
2	Over current
3	Encoder hall fault
4	Undervoltage protection
5	Overvoltage protection
6	Motor overspeed protection
7	EPROM internal fault
8	Parameter check error
9	Braking energy overvoltage protection
10	Overload protection



CAUTION!

- The remarks column is intended for trained personnel only and must not be used without consulting the manufacturer.
- If any of the issues listed above persist after a few attempts to perform the recommended remedies, contact your local supplier.

Technical data

Model	Foxtail	Siberian
Voltage / frequency	208V, 60 Hz, 3Ph, 1.500 W 380-415V, 50 Hz, 3Ph, 1.800 W	110-240V, 50/60 Hz, 1Ph, 1.500 W
Motor idle speed		
▪ 50 Hz	1.400 rpm	1.400 rpm
▪ 60 Hz	1.400 rpm	1.400 rpm
Grinding output	2.400 g/min* – 2.700 g/min	2.400 g/min* – 2.700 g/min
Max. permitted operating cycle		
	208V, 60 Hz: 20 min ON / 10 min OFF 380V, 50 Hz: 20 min ON / 10 min OFF	110-240V, 50/60Hz: 50 min ON / 10 min OFF
Recommended pause	10 minutes	10 minutes
Max. bean hopper filling quantity	2.500 grams	2.500 grams
Dimensions (W x H x D)	250x 810 x 320 mm with hopper	250 x 600 x 320 mm with hopper
Packaging dimensions (W x H x D)	275 x 690 x 505 mm (grinder) 400 x 320 x 315 (bean hopper)	275 x 690 x 505 mm (grinder)
Weight	34 kg (net) / 39 kg with hopper	25 kg (net) / 28.5 kg with hopper

Disposal

Packaging disposal



Dispose of the packaging by correctly sorting recyclable materials. Dispose of card and cardboard as waste paper and film as recyclable material

Grinder disposal



Old appliances may not be disposed into commercial/domestic waste. As a consumer, if you can no longer use your grinder, you are required by law to dispose of old equipment separately from commercial/household waste, e.g. at a collection point in your municipality. This ensures professional recycling and avoidance of negative impacts on the environment as much as possible.

Support & Service

Please contact your authorized service partner for PINECONE SWISS products in an event of service of maintenance.

For general inquiries and other customer service please contact:

www.pineconeswiss.com

PINECONE SWISS AG

info@pinecone-swiss.com

Bafflestraße 17b

9450 Altstätten SG

Switzerland