coffee 200

COFFEE AND COCOA MOISTURE, TEMPERATURE AND TEST WEIGHT METER

Connect

EN USER INSTRUCTIONS

WILE 200 COFFEE, COFFEE AND COCOA MOISTURE METER

Thank you for choosing Wile moisture meter.
Wile 200 Coffee measures moisture, hectolitre weight (test weight/ bulk density) and temperature easily and quickly. The meter has been developed to monitor the measurement conditions and guide the user through the process to achieve the most accurate measurement results. The meter uses the temperature and hectolitre weight results automatically to improve the accuracy of moisture measurement. The meter is equipped with a patented sample levelling system. The excess beans removed during the levelling process remain neatly in the groove running around the measuring chamber. To get the best user experience, please read these user instructions carefully before using the meter.

Content of the delivery set

1. Moisture meter **2.** Carrying case **3.** USB-cable **4.** Batteries **5.** User instructions

Use

Preparing for measurement

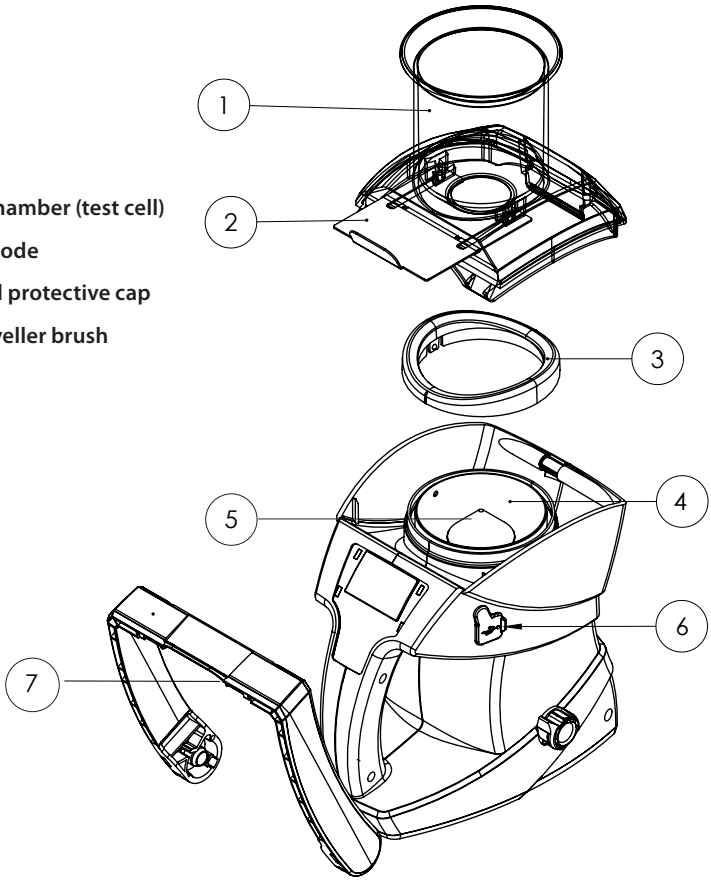
Important!- Wile meters are adjusted to match the common standard bean types as closely as possible. However, properties of beans are likely to vary due to, for instance, varying growing conditions or new species. Therefore, we advise you to compare the readings of your meter with your crops to oven testing or to whichever method your trade partners are using to make decisions on acceptance or use of your crops. Always take several samples and use their average as the result.
You will get the best measurement accuracy if the temperature of the meter and the beans is within the range of 16–32˚C. The temperature of the meter and beans should match each other as closely as possible. And it is advisable to store samples in air-tight containers.

Functional symbols

SYMBOL	DEFINITION
	The battery is low and needs to be replaced.
< 4.0 %	The beans are too dry for accurate measurement (4 % is the lower limit for the selected beans).
> 28.0 %	The beans are too moist for accurate measurement.
~ 34 %	An estimate of the beans moisture level when the value is outside the precise measurement range.
	Error message or warning (see the error list at the end of the user instructions).

Moisture meter and its parts

1. **Hopper**
2. **Slider**
3. **Collar**
4. **Measuring chamber (test cell)**
5. **Center electrode**
6. **USB port and protective cap**
7. **Leveller / Leveller brush**



Measurement

1.

Place the meter on a stable and sturdy horizontal surface. Make sure the measuring chamber is empty. Place the hopper with the rear edge first on top of the meter, and press the hopper down until the leveller locks the hopper.

2.

Start the meter by pressing the start button once ⏻.
Use the arrow keys ⇧ ⇩ to select variety for measurement and press **ENTER** ↵. Start the measurement process by pressing **ENTER** ↵ again.

3.

Make sure that the hopper slider is pushed in so the beans do not fall into the measuring chamber.

4.

Fill the hopper with beans. At the same time, the meter tares the weighting scale and moisture sensor with the measuring chamber empty.

5.

When the meter indicates **"POUR"**, release the beans in the hopper by pulling the slider open with a quick movement, and let the beans flow from the hopper into the measuring chamber.

6.

When the meter indicates **"REMOVE HOPPER",** pull the leveller towards you and lift the hopper off.

7.

Level the sample by pushing the leveller over the measuring chamber as far as it goes and back. The meter detects the sample is levelled and starts measuring automatically. Wait until the result is displayed.

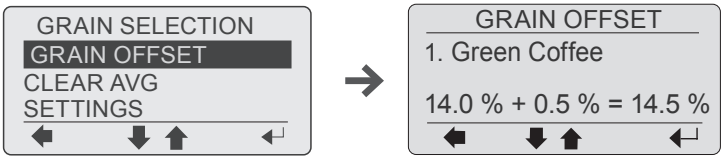
After the measurement, the sample used has to be disposed of in an appropriate manner.

Functions and settings

The meter settings can be viewed and changed from the **"SETTINGS"** menu. Use the arrow keys to scroll to the desired setting and change it with the **ENTER** key.

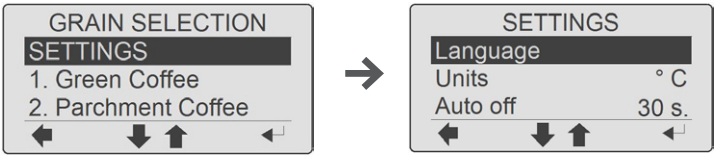
Adjusting the measurement result

The moisture indication may be adjusted to better match an oven test or another reference method. To do the **adjustment** select **"GRAIN OFFSET"** from the menu. After that, adjust the setting with the arrow keys, and then press **ENTER**.
The **GRAIN OFFSET** setting is individual to each type of bean.
If offset adjustment has been applied, it will be shown on the result display. For example, the text "**OFFSET** +0.5%" on the result display means 0.5 %-points has been added to the measuring result.



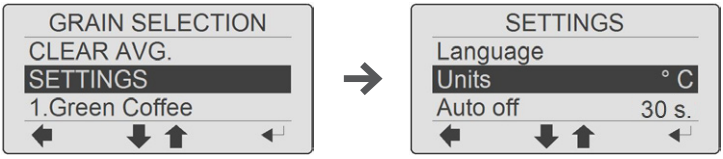
Language selection

Selection of the preferred menu language.



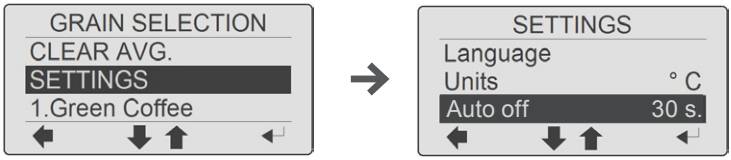
Units

Selection of the temperature and hectolitre mass (test weight) units. Press the green **ENTER** button to select either the Celsius or Fahrenheit temperature scale. With the Celsius scale, the unit used for hectolitre mass is kg/hl, while with the Fahrenheit scale it is lb/bu, as used in the United States.



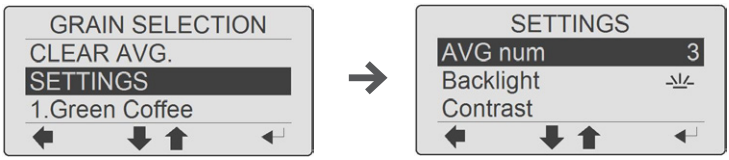
Auto off (Auto shutdown)

If the meter is not in use, it shuts down automatically after the set period of time (30 sec, 1 min, 5 min, 10 min, 20 min). The meter can also be turned off by pressing and holding the red button.



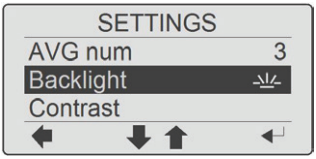
Calculating the average value

The meter automatically calculates the average of the previous measurements. In the settings, you can adjust the number of previous results (3, 6 or 9 measurements) to be averaged. The average value can also be reset by selecting **"CLEAR AVG".**



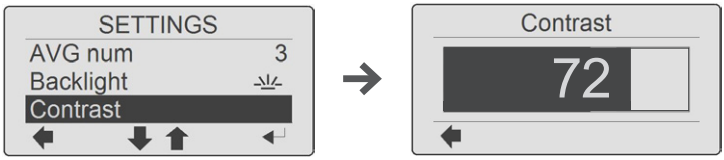
Backlight

The display backlight can be switched on or off.



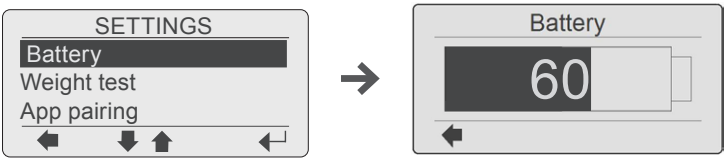
Contrast

The display contrast is adjustable.



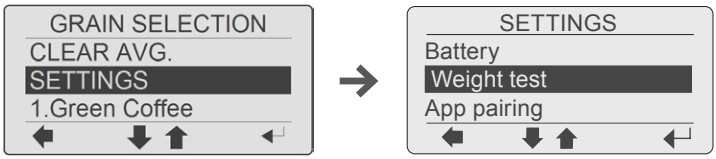
Battery

The battery status can be checked. If the battery charge level is below 22 %, the meter will warn you of it at start-up. The reliability of the measurement result shown on the display does not depend on the battery charge level.



Testing of the weighting scales

The weight test function can be used to check operation of the integrated weighing scale.
NOTE! Weighing is an important part of the moisture measurement. Inaccurate weighing will cause inaccuracy in both hectolitre weight and moisture readings.
Before starting the weight test function, remove the hopper and make sure that the measuring chamber is empty and the leveller brush is not touching the rim of the measuring chamber. Then place the meter on a stable horizontal surface, start the weight test and then wait for the tared (approx. 0 g) result.



The meter will now work much like an ordinary kitchen scale. Use a weight of 500 grams or less for this test. In absence of a calibrated weight, a small bag of gravel will work fine.

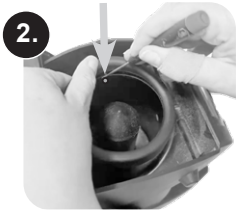
- Insert the weight on top of the measuring chamber and wait for a stable reading.
- Remove the weight and wait for a stable reading.
- Repeat several times and check that the readings with and without the weight are good and stable.
- Compare the readings to a known good weighing scale.

The scale tares automatically before each measurement and it's normal for the reading to vary by a few grams during this repetitive testing.

There could be a problem with the weighing scale if the results are incorrect or the results vary significantly from one test to another or if it takes more than a few seconds for the results to stabilize. Before seeking service, check for any grain or husks that could be stuck under the measuring chamber collar which could be blocking free movement. **To check this, repeat the following steps:**

1. Check the collar: Gently push the collar to tilt the measuring chamber slighly to the left, right, forward and back. It should move equally to all four directions.

2. Remove the collar: The collar may be removed for cleaning by pulling it up while gently pushing one of the small plastic pins visible inside the top of the measuring chamber wall. **Do not use excess force, especially downwards to avoid damaging the weighing scale!**



3. Clean the collar: Clean the collar and the rim of the measuring chamber by turning them upsidedown, then wipe with a cloth or a brush if needed.

Maintenance of the meter

- To clean the meter, wipe it with a dry or damp cloth.
- Do not use strong detergents, and make sure that moisture does not get inside the meter.
- Store the meter in its carrying case in a dry place, preferably at room temperature.

Cleaning the measuring chamber

Use a dry soft cloth to clean the measuring chamber. However, be careful not to damage the temperature sensor located on the bottom of the measuring chamber.

Battery replacement

The meter uses four AA size LR6 alkaline batteries. Always replace all batteries at the same time.
If the meter is not used for a long time, remove the batteries from the device.

Using Wile Connect App

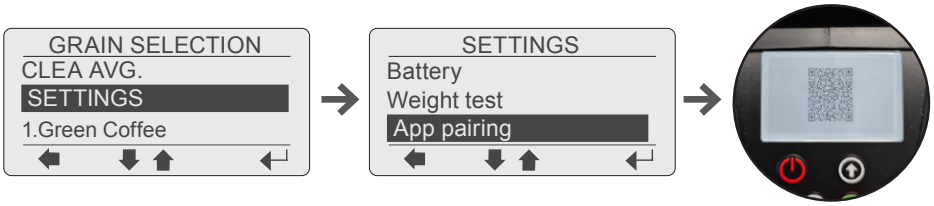
With Wile Connect app you can manage all moisture measurement data directly from your phone. **Download the app from Google Play Store or App Store.**

App pairing

Pair your meter to the app by scanning the pairing QR code on the meter.

1. On the meter go to **Settings** > Choose **App pairing** > The meter will give you the pairing QR code.

2. Open the app and select > **My devices** > **Add Device** > **QR Code** > **Scan the QR code** by pointing the camera towards the meter.
Your meter is now paired.

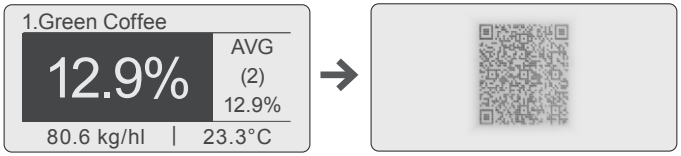


Scanning and saving measurement results

Do moisture measurement as usual.

1. On the result screen, press the **left arrow key** ⟵. The QR code with the latest result will appear on the screen.

2. Scan the result with the app. Go to > **Quick test** > **QR code** > **Scan the QR code** > See the results > **Save.**
Or optionally: Go to > **My Devices** > Choose your meter > **QR code** > **Scan the QR code** > See the results > **Save.**
Saved measurement results can be viewed in the **Results** tab.



Info

The Info view contains information about the meter's software versions for maintenance and customer service needs.

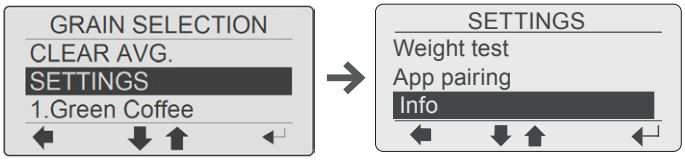


IMAGE	CAUSE	SOLUTION
	Critical error.	The meter needs to be delivered to an authorised service centre.
	The same weighing result with and without beans.	Start the measurement from the beginning. If it happens again, check the weighting scales.
	The tare result of the scales is too high.	Was the measuring chamber empty during the taring process? Perform a weight test and check the scales.
	Weight measurement uncertain. / The meter vibrated during the measurement. Increased measurement uncertainty.	Keep the meter steady.
	The moisture measurement result stabilises slowly.	Keep the meter steady. This could occur with very moist samples.
	Weight measurement too uncertain. / The meter vibrated too much during the measurement.	Keep the meter steady.
	The sample temperature below 2°C. / The measurement uncertainty is high.	To achieve the best results, the meter and sample temperature should be between 16°C and 32°C.
	The sample temperature above 50°C. / The measurement uncertainty is high.	To achieve the best results, the meter and sample temperature should be between 16°C and 32°C.
	The difference between the meter and the sample temperatures is large. / The measurement uncertainty has increased.	The difference between the meter and the sample temperatures should be as small as possible.
	Weight measurement result over 330 g.	Check that the leveller is not left above the measuring chamber. / Check the scales.
	Weight measurement result under 50 g.	Check that the leveller is not left above the measuring chamber. / Check the scales.
	Hectolitre weight (test weight) exceeds the normal value by over 20%.	Measurement uncertainty increased. / Check the scales.
	Hectolitre weight below the normal value by over 20%.	Measurement uncertainty increased. / Check the scales.
	Measuring chamber was not empty, or hopper slider was opened before instructed to pour.	Empty the measuring chamber and make sure it's clean. Wait for the "Pour" instruction before opening the slider.

Error messages and warnings

This measuring device displays error messages, the purpose of which is to guide the user in order to get the most reliable measurement results and to make sure that the meter is in good condition. You can check the symbols, their underlying causes and related solutions in the table.

Warranty

The meter has a two-year warranty against material and manufacturing defects. The warranty is effective for a period of 24 months from the date of purchase. The customer has to deliver the defective product to the manufacturer or the seller. A description of the defect, contact information, and a copy of the purchase receipt showing the date of purchase has to be provided with it. The manufacturer will repair the defective product or replace it with a new product as soon as possible. The manufacturer's maximum liability is limited to the purchase price of the product.
The manufacturer is not responsible for damages resulting from careless handling, misuse, dropping of the unit, or repairs made by a third party. The warranty does not cover any consequential damages that are directly or indirectly caused by the use of the product or the fact that it could not be used.

EU WEEE Statement

Under the WEEE Directive (2012/19/EU), this product should not be discarded with household waste but instead collected and treated separately as waste electrical and electronic equipment in compliance with local legislation. Discarded batteries must be recycled in accordance with local regulations.

EU Declaration of Conformity

According to ISO/IEC 17050-1 Farmcomp Oy (Jusslansuora 8, 04360 TUUSULA, FINLAND) under its sole responsibility hereby declares, that its products Wile 200 Coffee conforms to the EMC directive 2014/30/EU by following the harmonised standard EN IEC 61326-1:2021 and to the RoHS directive 2011/65/EU as amended by directive (EU) 2015/863 by following the harmonised standard EN IEC 63000:2018. Signed Declaration of Conformity documents are filed at Farmcomp Oy, Tuusula.

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