

Coffee & Cocoa Moisture meter



EN Operating instructions

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1. Box Contents

- Wile Coffee moisture meter
- carrying case
- carrying strap
- operating instructions
- 9 V battery (installed).

2. Usage

2.1. Preparation for the measurement

Important: The scales of Wile- moisture meter are developed to measure the quality of standard beans. Exceptional growth conditions and new sorts can considerably affect beans' features. Therefore, before the new harvest season we recommend to check the readings of your meter against an oven dried sample. Always take measurements of several samples and calculate the moisture content of the load by calculating the average of those measurements. If the measurement result is different, adjust the result according to the instructions in paragraph 3.2.

If the meter has not been used for some time, follow these steps:

- replace the battery
- read the operating instructions
- make sure that the measuring cup is empty and clean

2.2. Taking the sample

 Always take the samples from different places of the load. We recommend taking at least five samples. Define the moisture content of the load by calculating the average value of those five measurements.

- Remove scrap and other exceptional beans from the samples.
- When taking the sample directly from the dryer wait until the temperature of sample is near meters temperature.

2.3. Filling the measuring cup



- fill the measuring cup one quarter with beans (1)
- gently shake the meter (beans will settle tighter in the measuring cup)(2)
- fill the measuring cup to the brim (3)
- wipe off excess beans (4)
- twist and tighten the cap until the center of the cap is on the same level with the cap's surface (5,6).

2.4. Measurement step by step

Switch on the meter with a single press on the **P**-button. The number of the selected scale (see scales from side sticker) will appear on the display, for example **-1-**. Change the scale with **F**-button if needed, when the number of the scale is displayed.



The meter will automatically do measurement. During the measurement you will see **run** and then the moisture content in weight percent, for example **13.8**



After the measurement the meter will automatically turn off and will be ready for a new measurement.

You can ensure that the result represents the average quality of the entire beans load by taking the measurements from several different places of the load.

2.5. Scales

The complete list of scales can be found on the side sticker of the meter. There is an additional -0- scale, which can be used together with conversion charts. In this case you make the measurement using -0- scale and find the corresponding moisture value from the chart. Scale is also used by Wile service department to calibrate the meters.

3. Processing the result

3.1. Average calculation

The meter can calculate the average value of several measurements. After you have made a measurement, the result can be included for the average calculation by pressing **F**-button once while the result is shown on the screen.

The average calculation is ready when two numbers, for example **A05** and **13,8** appear alternating on the display.



The values used in the example mean:

- A05 the number of measurement results included into the average value is 5
- **13,8** the average value of those 5 measurements.

To erase average calculation memory just press and hold the **F**- button and switch on the meter with a single press on the **P**-button. When you see **A** on the display, release the **F**- button. Then erase the average value by pressing and holding down the **F**- button. The memory is erased when **0** and **A00** appears on the display.

Before calculating the average value of every new load of material, make sure that average calculation memory is empty and erase it if required.

Average calculation memory can accommodate a maximum of 99 results. If no more results can be added to the memory, the number on the display will start blinking.

3.2. Adjusting the result

If the quality of the measured material is different from normal, the result can be incorrect. You can adjust the result shown by the meter to conform to a reference value.

Adjusting the value upwards

When the measurement result is displayed press twice the **F**- button. Three bars will appear on the upper edge of the display. Wait for a moment and the result appears on the display again. Now each time you press the **F**- button, 0,1 moisture % will be added to the result



Adjusting the value downwards

When the measurement result is displayed, press the **F**- button three times. Three bars will appear on the lower edge of the display. Wait for a moment and the result appears on the display again. Now each time you press the **F**- button, 0,1 moisture % will be reduced from the result.



Note! This adjustment is specific to the used scale. In other words there can be defined own adjustment for each scale.

3.3. Display the scale adjustment

If the selected scale has been adjusted, you will see the adjustment displayed after run- text. Each scale can be adjusted for +/- 4 moisture percent. The value displayed may be for example "-.5". This value means that the scale was adjusted downwards for 0,5 moisture percent.

-.5

3.4. Erasing the scale adjustment

When the moisture content result is displayed, you can erase the adjustment. To do that press and hold **F**- button for about 6 seconds.

3.5. Exceptional result

If the measurement result exceeds the upper limit of the measurement range, you will see **HI** on the display and if lower limit is reached you will see **LO**.

If you get **HI** or **LO** as a measurement result check if the correct scale is used.

4. Properties of scales

The scales of Wile Coffee - moisture meter are developed in accordance with the official methods of definition of moisture content. To develop the scales we use the samples which represent mostly cultivated varieties in standard growth conditions.

Exceptional growth conditions can affect the quality and electrical properties of beans

Therefore, before the new harvest season we recommend to check that the readings of your meter conform to the result of oven drying. If the measurement result is different, adjust the result according to the instructions in paragraph 3.2. This is especially important when you handle a lot of beans or when you suspect that the quality of beans you handle is different from normal.

5. Battery

The meter runs on 9V battery of the type 6F22 or a similar alkaline battery. The battery is included in a new meter and is ready for use.

The meter gives a warning about the low battery voltage with **LOBAT**-text in the upper left part of the display.



If the battery is almost empty, the display will show some random marks and **LOBAT**- text can fade.

Remove the battery from the meter, if it is not used for a long period of time. If you suspect a fault in the meter, always test the battery first. Please note, that a battery slowly discharges itself even if the meter is not used.

6. Technical features of the meter

Wile Coffee moisture meter shows the moisture content of the material in weight percent. Measurement method is based on the capacitance measurement of the material. The repeatability of the measurement is +/- 0,5 moisture percent or better

- average calculation
- opportunity to adjust the measurement result to conform to the result of oven drying.

Method of moisture content definition is based on the technical specification **ISO 6673**.

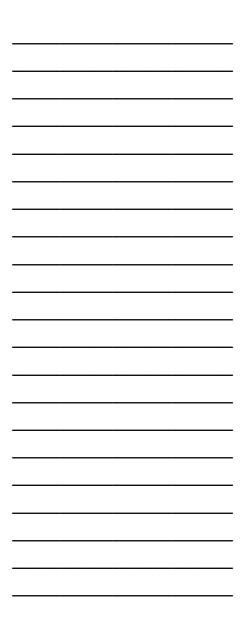
Our method to sample the beans is based on ISO 950 standard and while handling the samples we follow ISO 7700/1 and ISO 7700/2 standards. ISO = International Organization for Standardization.

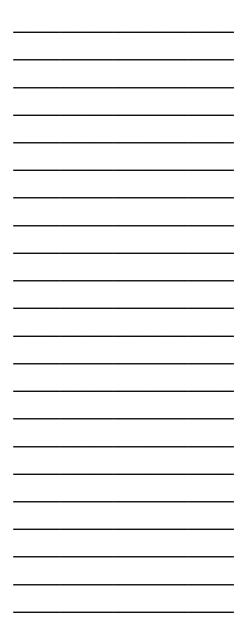
7. Warranty and the maintenance

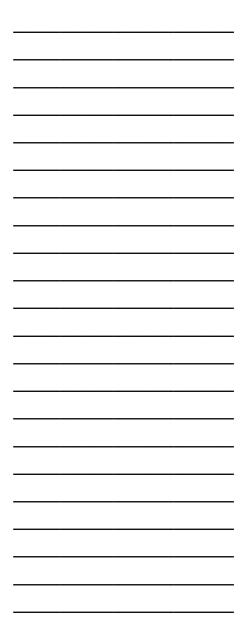
All Wile products carry a 12 month manufacturer warranty for materials and workmanship. The warranty is valid for 12 months from the date of purchase on the receipt. To claim the warranty, the customer should return the defect product to the Manufacturer, reseller, or the nearest Wile Service Partner. The warranty claim must be accompanied by the description of the fault, copy of sales receipt and customer's contact information. The manufacturer / Wile service partner will repair or replace the defective product and return it as soon as possible. The liability of Farmcomp is limited to the price of the product in maximum. The warranty does not cover any damage that is caused by incorrect or careless use of the product, dropping the product or damage that is caused by repairs that are carried out by nonauthorized personnel. Farmcomp does not accept any responsibility for any direct, indirect or consequential damages that are caused by the use of the product or the fact that the product could not be used

The meter can be cleaned with wet or dry fabric. Do not use any detergents or other strong cleaning substances. Do not put any liquids inside the meter. Keep the meter in warm and dry place.

If you suspect a fault in the meter, please always test the battery first. If the meter requires repair, contact your local Wile retailer for assistance. Wile moisture meters can be repaired only by authorized Wile service.









Declaration of Conformity according to ISO/IEC Guide 22 and EN 45014

Manufacturer's name:

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FINI AND

declares, that the product

Product name: Moisture tester

Model numbers: Wile 55

conforms to **the EMC directive 2004/108/EC** by following the harmonised standard

EN 61326-1:2006

Tuusula, Finland

April 2, 2009

Lasse Paakkola Managing Director

Original language: Finnish Signed Declaration of Conformity documents are filed at Farmcomp Oy

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