

WILE 65



EN

Operating instructions

Quick Start Guide

Taking the sample

1. Take a representative sample
2. Take samples from different places
3. Take at least 5 samples
4. Remove scrap, green and other exceptional grains.
5. If taking the sample from the drier wait for the temperature compensation **OR** warm the cup with warm grain.
6. Calculate the average value of your five measurements.

! Remember moisture varies in different places in the grain drier.

Filling the measuring cup

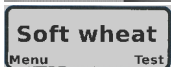


1. Fill the measuring cup $\frac{1}{4}$ full with grain
2. Gently shake the meter (grains will settle tighter in the measuring cup)
3. Fill the measuring cup to the brim
4. Wipe off excess grain
5. Place on the cap and twist.
6. Tighten the cap until the center of the cap is on the same level as the cap's surface.



Press **ON**

Current grain is shown



Press **ON** - Test

CONTENTS:

1. Preparation for the measurement.....	4
2. Taking the sample.....	5
3. Filling the measuring cup.....	5
4. Switching the power On.....	6
5. Switching the power off.....	6
6. Options of the meter.....	6
7. Checking/Choosing the Grain/Seed.....	8
8. Measuring the moisture content.....	9
9. Average calculation.....	9
9.1. Saving to the memory.....	9
9.2. Whats saved in the memory.....	10
9.3. Deleting the average memory.....	11
10. Calibration adjustment.....	12
10.1. Adjusting the result.....	12
10.2. Display the calibration adjustment	13
10.3. Deleting the calibration adjustment	14
11. Measurement the external temperature.....	15
12. Changing the language.....	16
13. Use a Manual calibration.....	16
14. Exceptional result.....	17
15. Grain properties.....	18
16. Technical features of the meter.....	19
Technical features of Wile 65 meter:.....	19
17. Battery.....	20
18. Warranty and maintenance.....	21

Operating instructions for Wile 65

1. Preparation for the measurement



Important: Wile have spent 50 years developing the calibrations for all the different grains and seeds to give you the most accurate measurements.

Results can be affected by,

- Not filling the cup properly.
- Taking inconsistent samples
- Not taking enough samples
- New strains of grain
- Exceptional growth conditions

We recommend before the new harvest season checking the readings of your meter against an oven dried sample. If the measurement result is different from the reference value, adjust the result to conform to the reference value according to the instructions in **Adjusting the result**

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

1. Replace the battery (for more details see paragraph **Battery**)
2. Read the operating instructions
3. Empty and clean the measuring cup
4. Clean the measurement cup with a wood stick or tough brush.

2. Taking the sample

1. Take a representative sample
2. Take samples from different places
3. Take at least 5 samples
4. Remove scrap, green and other exceptional grains.
5. If taking the sample from the drier wait for the temperature compensation **OR** warm the cup.
6. Calculate the average value of your five measurements.

! Remember moisture varies in different places in the grain drier.

3. Filling the measuring cup



1. Fill the measuring cup $\frac{1}{4}$ full with grain
2. Gently shake the meter (grains will settle tighter in the measuring cup)
3. Fill the measuring cup to the brim
4. Wipe off excess grain
5. Place on the cap and twist.
6. Tighten the cap until the center of the cap is on the same level as the cap's surface.

4. Switching the power On

Press **ON/OFF**



Power will switch off automatically in 30 seconds

The name of the currently selected grain will appear on the display.



5. Switching the power off



Press **ON/OFF**
OR



Go to the OFF option.

Power will switch off automatically in 30 seconds

6. Options of the meter

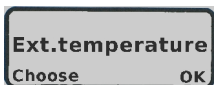


Press **Menu** to scroll down the list of options.

Menu Options;

Ext. Temperature

Shows External Temperature



Average

Controls the average calculation

Grain

Choose the type of grain/seed.

Adjustment

Change your grain calculation to load test results

Language

Change Language

Off

Switch Off



Confirm your choice press **ON/OFF (OK)**

7. Checking/Choosing the Grain/Seed

Switch ON



Go to Options by pressing **Menu**,



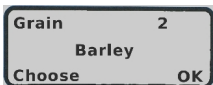
Press **Menu** until **Grain** appears on the display.



Press **ON/OFF (OK)** when **Grain** is displayed.



Press **Menu** until the name of the grain is displayed.



There are 16 grains/seeds listed in your meter.



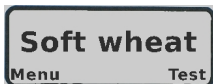
Confirm your choice press **ON/OFF (OK)**

8. Measuring the moisture content

Switch ON



Make sure external temperature probe is NOT connected



When correct grain is shown



Press **ON/OFF**.



The meter will calculate the moisture content.

The temperature of the grain will also be displayed.

9. Average calculation

9.1. Saving to the memory.

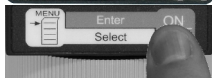


Measure as above. When the result is displayed

Press **Menu**

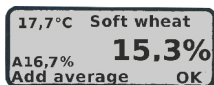


Add average appears.



Press **ON/OFF(OK)**

The result has been saved.



Average value of all the saved results will appear on the display.

Don't want to save the measurement
– Do nothing



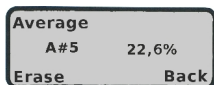
Important! Before new measurements make sure the memory is empty.

9.2. Whats saved in the memory

Switch **ON**



Go to **Average**



A#5 = Number of results saved for average calculation is 5.

22,6% = the average value of those 5 measurements.



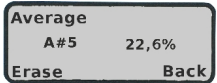
Don't want to delete it - press **ON/OFF**.

9.3. Deleting the average memory

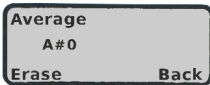
Go to **Average**



Press **OK**



Press **Menu**



The memory is now empty for the grain selected.

A#0 appears on the display.



Return to the main menu press **ON/OFF**.



Important!

Before new measurements make sure the memory is empty.

Remember there is an average calculation stored for each of the 16

grains/seeds.

10. Calibration adjustment

This calibration is used if your conditions change and the meter is constantly reading differently from your local grain dealers equipment.

It allows you to make a +/- adjustment to the Wile 65 measurement for all readings of a grain to be consistent with the grain dealers equipment.

It should be noted that the Wile moisture meters are calibrated against oven tested samples which are the most accurate.

10.1. Adjusting the result



Make the measurement as usual.



When the result is displayed
Press **Menu**



Adjust +
or Press **Menu**

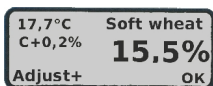


Adjust -
appears on the left
lower edge of
display.

Choose the correct adjustment

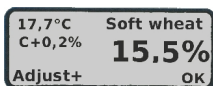


Press **ON/OFF** until the needed value is displayed.



Press **ON/OFF** Adds/Deducts 0.1% moisture for each **Press**.

When you are adjusting the result the calibration adjustment value is displayed on the screen, e.g. **C+0,2%**.



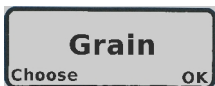
C+0,2% = the calibration was adjusted upwards for 0.2 moisture percent. When the correct value is displayed, wait for the meter to go off automatically.



Note! This adjustment is specific to the grain/seed chosen, and will be used to adjust any further measurements.

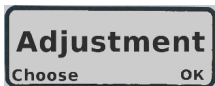
10.2. Display the calibration adjustment

Switch **ON**



Choose **Grain**

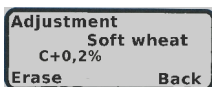
Go to **Adjustment**



Pressing **Menu**



Press **ON/OFF(OK)**



Value = C+0.2%
Press **ON/OFF**

10.3. Deleting the calibration adjustment

Switch **ON**

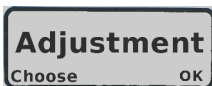


Choose **Grain**

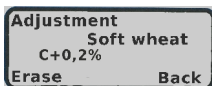
Go to **Adjustment**



Pressing **Menu**



Press **ON/OFF**
to get to the
Adjustment menu.



The scale
adjustment value
will appear on the
display.



Now you can delete
the scale
adjustment
Press **Menu**



After the scale adjustment has been deleted **C0.0%** is displayed.



Return to main menu
Press **ON/OFF**.

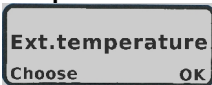
11. Measurement the external temperature

Connect **Wile 651 L** -external temperature probe (Accessory) to the connector at the bottom of the meter.

Switch **ON**

Go to **Ext. Temperature**

Pressing **Menu**



Press **ON/OFF**



The temperature of the material appears.



Return to main menu
Press **ON/OFF**.



Note 1: When external temperature probe is not connected to the meter, the temperature, which appears on the display, is the temperature of the meter.

Note 2: Always remember to disconnect the external temperature probe before measuring the moisture.

12. Changing the language

Switch **ON**

Go to **Language**



Press **ON/OFF(OK)**



Press **Menu** until the language required is displayed.



Confirm your choice

Press **ON/OFF(OK)**

13. Use a Manual calibration

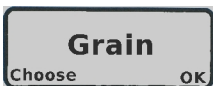
When there are grains or seeds not included in the 16 pre-programmed into the meter e.g. Coffee or Cotto, etc. You can still measure the moisture based on a manual calibration.

In Wile we have calibrations for over 1000 different grains and seeds used all over the world.

For a particular manual calibration contact your local dealer.

Switch **ON**

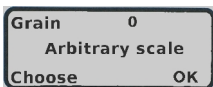
Go to **Grain**



Pressing **Menu**



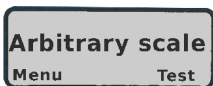
Press **ON/OFF(OK)**



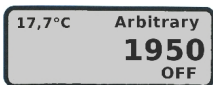
Press Menu
until
Arbitrary scale
is displayed.



Confirm
Press **ON/OFF(OK)**



Continue to make
the measurement
as normal



You'll see the
measurement
result

Use the manual calibration chart to convert the reference given by the meter to the moisture %.

14. Exceptional result

If the measurement outside the minimum and maximum range then you will see **<x** or **>x** on the display. **x** means the upper or

the lower value of the selected scale.



If you get **<x** or **>x** as a measurement result check if the correct scale is used and always make control measurements.

15. Grain properties

The scales of Wile 65- 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 grain sorts in standard growth conditions.

Properties of mostly cultivated grain types can differ from standard grain properties. The main reasons for exceptional grain properties are;

- Climate changes
- The quality of different types of grain.
- Exceptional growth conditions
- The electrical properties of the seeds.

To avoid this problem use the **Adjustment** option to align the measurement with the reference value (see paragraph **Adjustment**).

Before the new harvest season we recommend that you check the reading of your meter against an oven dried sample in a grain reception center. If the result is different, adjust the meter to agree with the reference value (see paragraph

Adjustment).

For example, if the specific weight is 10% lower than normal, the meter can show a too low moisture content.

Correspondingly if specific weight is higher than normal, the meter can show a too high moisture content.

16. Technical features of the meter

Wile 65 measures the moisture content of whole grains and seeds. Wile 65 used together with Wile 651L -external temperature probe (accessory) is suitable for measuring the temperature of stored grain and seeds, hay, compost etc.



Technical features of Wile 65 meter:

- Moisture read-out for 16 different grains
- Alphanumeric display for easy use
- Use an external temperature probe
- Automatic temperature compensation
- Average calculation (99 measurements)
- Adjustment of the measurement to conform to the result of oven drying as a reference value or to other reference

value (use **Adjustment** -function).

- Quick guide to the measurement on the side label of the meter

The meter shows the material moisture content in weight %. Measurement is based on the alternating current resistance (capacitance). The measurement repeatability is +/- 0,5% moisture or better.

Moisture measurement range:

grain and seeds 8-35%

oil seeds 5-25%.

(for more information see the package box).

Temperature measurement 0-60°C:

Method of moisture content definition is based on the technical specification: grain **ISO 712**, oil seeds **ISO 665** and corn **ISO 6540**.

Our method to sample the grain 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).

17. Battery

The meter runs on a 9V battery of the type 6F22 or a similar alkaline battery. Some batteries are lower quality and their poor performance can affect the meter.

The meter gives a warning about the low battery voltage with **Battery low** -text.

The battery cover is located on the bottom of the meter. Open the cover by pushing the locking lever over the battery symbol and replace the battery.

Remove the battery from the meter if the device is not used for a long period of time. To ensure the correct functioning of the meter replace the battery when needed. If you suspect a fault in the meter, always test the battery first. Please note, that a battery slowly discharges itself even when the meter is not used.

18. Warranty and 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 defective 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 non-authorized 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 does not require any special service.

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 a dry place, preferably at room temperature. Prevent the meter from falling and getting wet.

19. Troubleshooting

Different readings
- Big variations

Change Battery

Check method of filling the meter

Check avg. Is 0

Representative samples

Different readings
- By the same %

Check if there is an adjustment value.



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

Manufacturer's name:

Farmcomp Oy

and address:

Jusslansuora 8
FIN-04360
TUUSULA,
FINLAND

declares, that the product

Product name: Moisture tester

Model numbers: Wile 65

*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

Farmcomp Oy, Jusslansuora 8, FIN-

04360 Tuusula, Finland

tel +358 9 77 44 970,

e-mail: info@farmcomp.fi

Company ID FI 07308235 Tuusula,

Finland





Copyright Farmcomp Oy 2010, all rights reserved

FARMCOMP OY
Jusslansuora 8
FI-04360
TUUSULA
FINLAND

Tel. +358 9 7744 970
Fax +358 9 7744 9744
info@farmcomp.fi
http://www.wile.fi