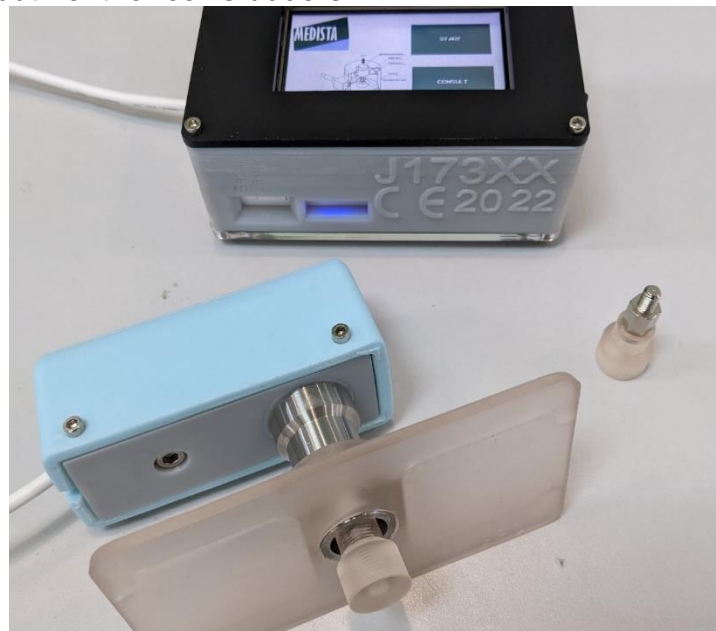# Agrosta®DFT14
Digital Firmness Tester for special use

The Agrosta DFT14 is a load cell tester that can be adapted for many sectors, either as penetrometer (With needle for testing cauliflower or cabbage for example) or deformation tester for surface firmness testing (For cows udders or women breasts for example)

Version 2023 :

Version 2022 with abutment for cows udders

Many thanks for having acquired an Agrosta instrument

Your package contains :
- A Box with the instrument itself and the sensor
- A SD card already inserted in the instrument
- A charger
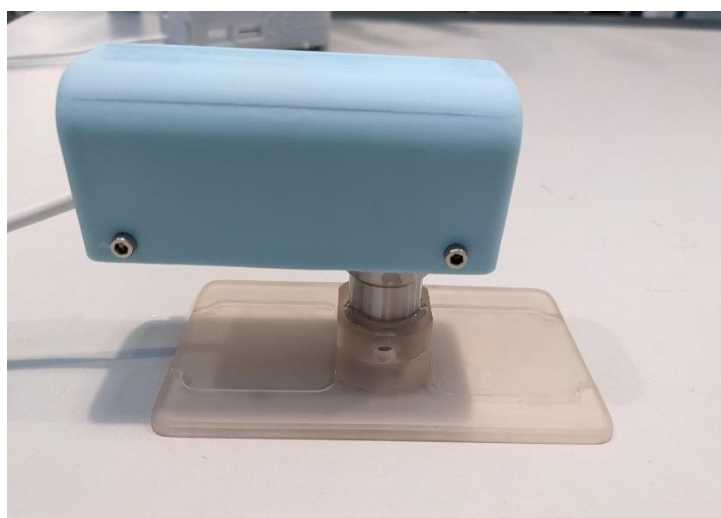- A certificate of conformityA manual

Agrosta®DFT14
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The AGROSTA®DFT14 is entirely designed and assembled in France. The motherboard comes from Taiwan, and the shield boards are made in the USA. The battery comes from DURACELL in the UK.
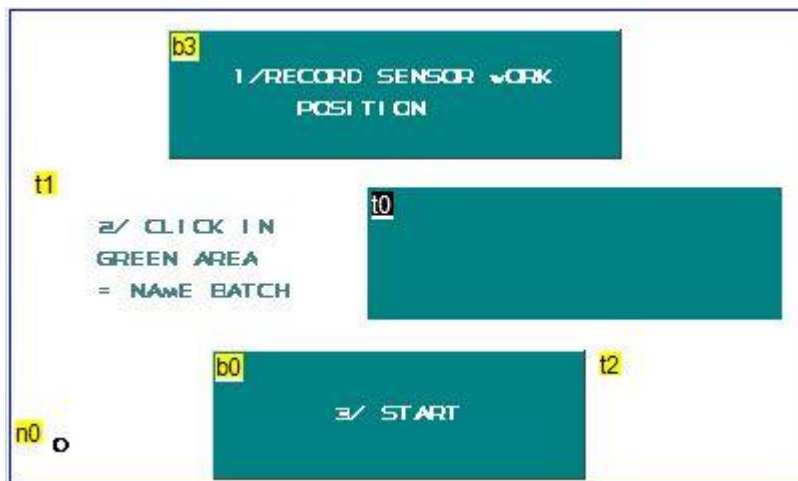
The AGROSTA®DFT14 is not waterproof! It is a precision instrument; please take care to avoid dropping or knocking it.

The AGROSTA®DFT14 has a two year guarantee from its date of shipment (Except on SD card, no guarantee on SD card).

- Minimum grams (Threshold) : 100
- Maximum 12000 grams
- Accuracy: +/- 3 grams
- Maximum memory capacity: Huge – Limited only by SD.

1) CLICK ON START

2) CLICK ON "RECORD SENSOR WORK POSITION" : BUTTON ON TOP WHILE TAKING THE SENSOR IN HAND IN THE RIGHT POSITION

3) CLICK ON THE GREEN SQUARE IN THE MIDDLE, A KEYBOARD IS DISPLAYED

4) TYPE THE NAME OF THE BATCH, AND CLICK ON "OK"

PS : Points 3 and 4 can be skipped, in this case, the batch will have no name, which is not a problem for the instrument

5) CLICK ON "START"

The measurement page is displayed, you can start the measurements one after each other, statistics are updated
Once you have finished to measure the batch, click on "HOME OR NEW BATCH"

6) CLICK ON "CONSULT"

On the "CONSULT" page, you have access to the statistics of up to 15 batches. The batches displayed are the ones that you have created since the last switch on of the device
If you want to have an access to the full data (each measurement and statistics), you can use the microSD, storing data under csv format (Excel compatible) – each batch is stored in a file having the name of the batch

Take care to the side when placing the SD : Bask side of the SD (no logo) looking at the top
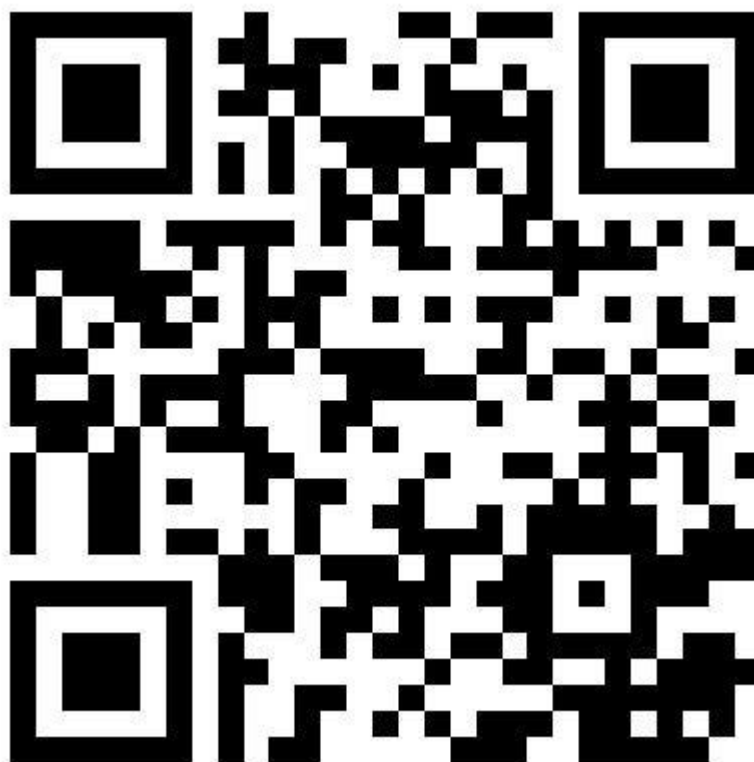
Agrosta®DFT14
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USE THE ANDROID APP FOR SMARTPHONE AND TABLET

- First, switch on your device and associate it to your phone or tablet
- *For this, go in PARAMETERS / BLUETOOTH and click on "Add device"*
- Once it is associated, switch the DFT14 off and on again

https://www.agrosta.org/DFT14.apk

- Once the file is downloaded, you will find it in the DOWNLOADS folder of your smartphone or tablet
- Click on it in order to install it
- You will have several warnings as this file does not come from GOOGLE PLAYSTORE
- The first warning says "Setup of unknown applications is not authorized on this phone"
- Click on PARAMETERS
- Select "ALOW THIS SOURCE"
- Click on INSTALL
- Then you have a warning : "BLOCKED BY PLAY PROTECT" : This app can be dangerous
- Then click on INSTALL ANYWAY

THEN CLOSE THE APP (NOT ONLY MASKING, CLOSING REALLY – IF NOT SURE, SWITCH OFF AND ON AGAIN YOUR PHONE)
SWICTH YOUR AGROSTA 100 FIELD OFF AND ON
CLICK ON START ON THE TOUCHSCREEN OF THE AGROSTA 100 FIELD
WAIT 30 SECONDS
LAUNCH THE APP – IT WILL CONNECT AUTOMATICALLY

Once you launch the app, you might have this message (Especially for android versions till 11), does not happen on Android 12 and 13 : "**THE PREMISSION BLUETOOTH_SCAN HAS BEEN DENIED, PLEASE ENABLE IT IN THE SETTINGS APP**"
In this case :
- Close the app
- Go to the parameters of your phone
- In the parameters, select APPLICATIONS
- Then select AGROSTA
- Then select AUTHORIZATIONS or PERMISSIONS
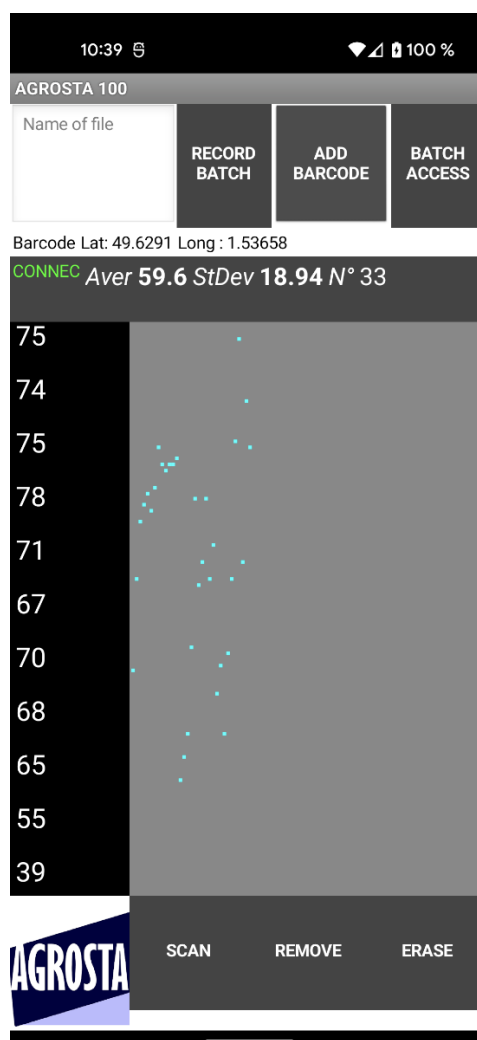*- Then enable the LOCATION / or DEVICES DETECTION*

Please note the fact that, as we use Bluetooth LOW ENERGY (BLE), you have to switch OFF and ON again your AGROSTA 100 Field each time you connect to the app
If you close and re-open the app, it will re-connect only if you switch off and on again the AGROSTA 100 FIELD
It is the same after giving the permissions, switch off and on the AGROSTA 100 Field

Agrosta®DFT14
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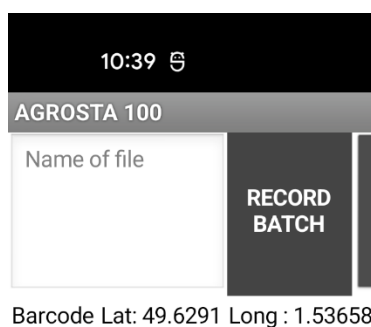
- Once installed, start the app :

- You see now CONNECTED appearing in green, which means the device is connected to your smartphone / tablet
- You can now start the measurements

- Once you have finished to measure your batch, enter a name of file and then click on RECORD BATCH

- If you use the name of an existing file, the data will be added at the end of the file (append)
- You can consult the previous batches by clicking on "BATCH ACCESS"

- Click on the button "BACK" in order to return to the measurement screen

- The files are available under ".csv" format (Excel compatible) with separator ";"

- There are located here on your phone or tablet : **Android/data/com.lak.DFT14/files**

Agrosta®DFT14
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- Here is how a file look like after having stored 2 batches under same file name :

	A	B	C	D	E	F	G	H
1	79	57	45	60	60	55	51	
2	Average	58.1						
3	Standard De	9.83						
4	Barcode ref	X000JC70T1						
5	GPS Position	Lat: 49.62905	Long : 1.53655					
6	65	56	56	77	67	66	77	58
7	Average	65.2						
8	Standard De	7.93						
9	Barcode ref	3,1839E+12						
10	GPS Position	Lat: 49.62905	Long : 1.53655					
11								
12								
13								
14								

A1 : 79