

The Agrosta®100USB is a durometer that measures without destroying the hardness of
fruits, vegetables,
And of different farm-products, agro-industrial products and foodstuffs



Mark and patent registered.
Designed and manufactured by AGROSTA

Congratulations for having acquired an AGROSTA®100 USB!

Your box contains:

- The device itself composed by the Usb box with pug, and a the sensor
- The software to be installed (to be downloaded at <https://www.agrosta.org/100USB.zip>)
- The sensor according to your requirements
- The manual
- Optional Tips and barcode scanner if ordered
- A set of tip protections

The AGROSTA®100 USB has been completely designed and assembled in France. The main electronic board (Made in USA) has been manufactured through a highly robotized process.
The AGROSTA®100 USB is not waterproof ! It is a precision instrument, avoid falls and shocks
The AGROSTA®100 USB is guaranteed 2 years from the date of shipment

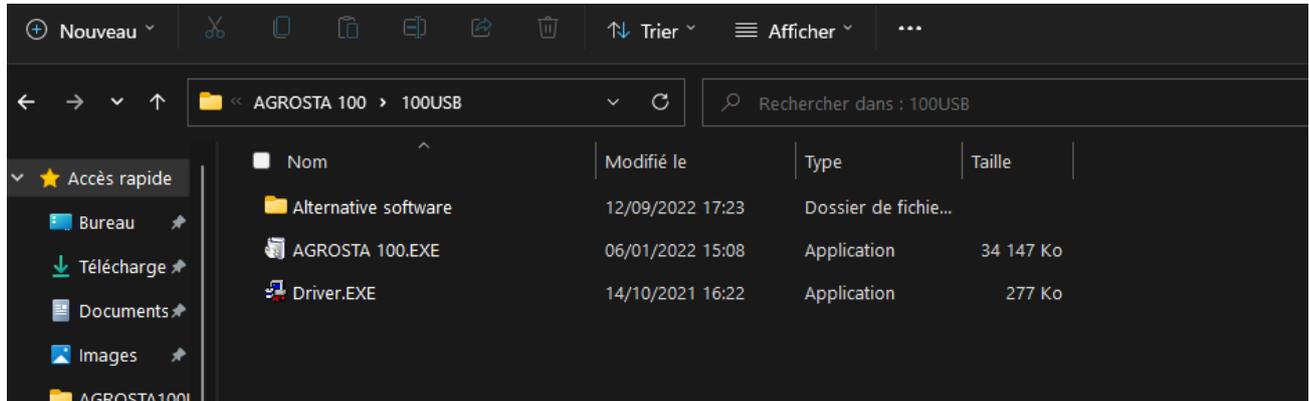
- Minimal % measurement : 5%
 - Maximal % measurement : 100% when completely pressed (Shore A standard = 8.06 N for 100%)
 - Resolution : +/- 1%
 - Precision 24 Bits (10 million steps on the 100%)
-
- A100-10 sensor for **peaches** (35% to 95%), **apricots** (45% to 95%), **grapes and kiwis** (35% to 95%) – With the 10 mm tip, a reading of 85% corresponds to 4.5 Kg per 0.5 cm² with a penetrometer.
 - A100-25 sensor for **tomatoes** (values from 45 to 80), **cherries, plums, melon flesh, grapes** (values from 30 to 80), **blueberries** (values from 25 to 70 - destructive), **peppers**
 - A100-50 sensor for **strawberries**

1/ INSTALL DRIVER

Download the software at :

<https://www.agrosta.org/100USB.zip>

Unzip the file, you obtain a folder 100USB, open it:

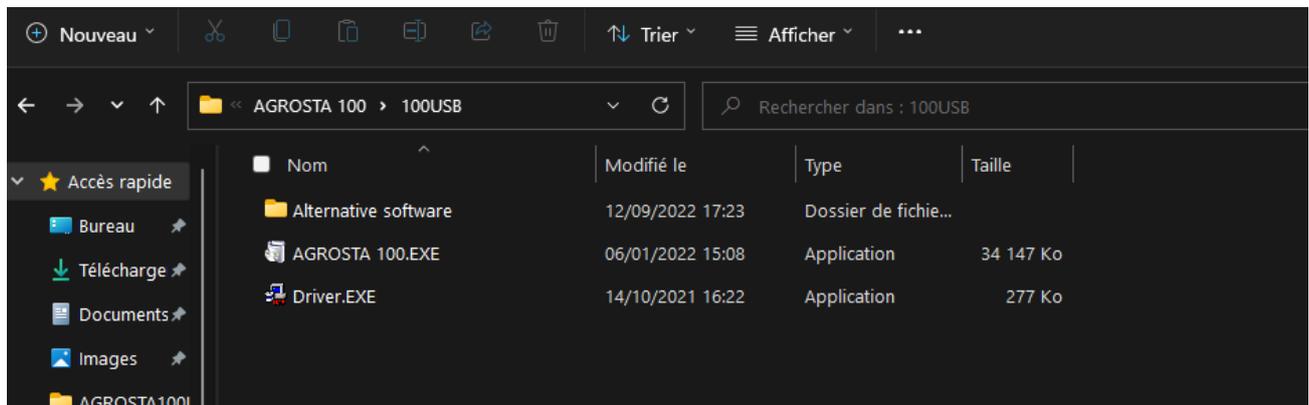


Double click on “Driver” – Follow setup procedure

2/ CONNECT INSTRUMENT WITH USB CABLE TO COMPUTER

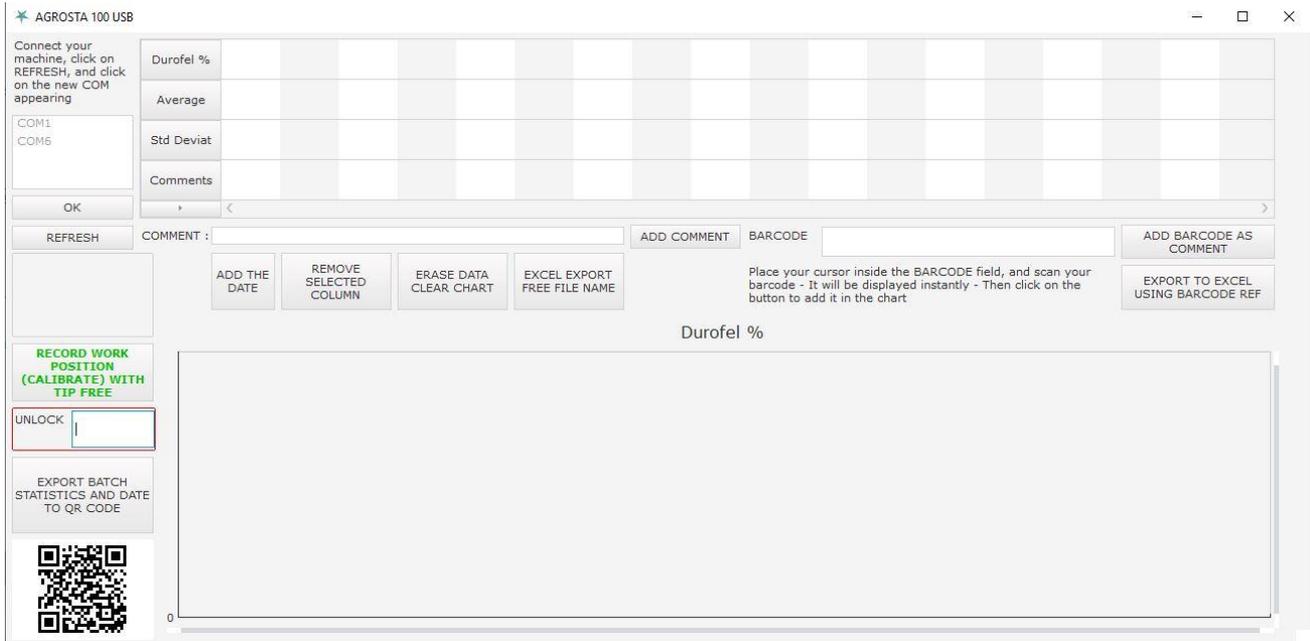
3/ WAIT A FEW SECONDS TILL IT IS RECOGNIZED

4/ INSTALL SOFTWARE FROM FOLDER



- Double click on “AGROSTA 100”
- Follow Setup procedure

5/ THE SOFTWARE STARTS IMMEDIATELY



- On the left side of the screen appears a list of COM ports
- Select the one corresponding to your machine
- Usually, the last COM port corresponds to your machine

- Take the sensor in hand, and maintain it in work position (the position you will use for taking measurements) – The tip shall be free of any pressure (The sensor takes its origin)
- Click 2 times on “RECORD WORK POSITION” – The button changes and becomes green



6/ TRY MEASUREMENTS BY PRESSING WITH YOUR FINGER FIRMLY ON THE TIP

AGROSTA 100 USB

Connect your machine, click on REFRESH, and click on the new COM appearing

Durofel %	88	54	78	83
Average	76	72	81	83
Std Deviat	15,06	15,50	3,54	0,00
Comments				

COM1
COM6

OK

REFRESH COMMENT : ADD COMMENT BARCODE ADD BARCODE AS COMMENT

ADD THE DATE REMOVE SELECTED COLUMN ERASE DATA CLEAR CHART EXCEL EXPORT FREE FILE NAME

Place your cursor inside the BARCODE field, and scan your barcode - It will be displayed instantly - Then click on the button to add it in the chart

EXPORT TO EXCEL USING BARCODE REF

88

RECORD WORK POSITION (CALIBRATE) WITH TIP FREE

UNLOCK

EXPORT BATCH STATISTICS AND DATE TO QR CODE

Durofel %

Value	Durofel %
88	88
54	54
78	78
83	83

7/ START A NEW BATCH, ENTER BATCH DETAILS

AGROSTA 14 USB

Connect your machine, click on REFRESH, and click on the new COM appearing

Grams	3430	3654	3416	3040	12505
Average	5209,00	5653,75	6320,33	7772,50	12505,00
Std Deviat	4084,54	4574,49	5359,38	6692,77	0,00
Comments	2019 / 4 / 5 315414324				

COM1
COM14

OK

REFRESH ADD THE DATE COMMENT : ADD COMMENT BARCODE ADD BARCODE AS COMMENT

REMOVE SELECTED ERASE DATA EXCEL EXPORT

Grams mLb

Place your cursor inside the BARCODE field, and scan your barcode - It will be displayed instantly - Then click on the button to add it in the chart

EXPORT TO EXCEL USING BARCODE REF

EXPORT BATCH STATISTICS AND DATE TO QR CODE

3430

Pressure

Value	Pressure
3430	3430
3654	3654
3416	3416
3040	3040
12505	12505

- The following buttons are available in the software :
 - o ADD THE DATE, which adds the date inside the chart
 - o REMOVE SELECTED COLUMN, which removes the column (Statistics already displayed : Average and Standard deviation are not adjusted, but future statistics : Future columns to be displayed will include this modification)
 - o ERASE DATA deletes all data inside the chart
 - o EXCEL EXPORT WITH FREE NAME choice : You can export data to Excel and name the file
 - o EXPORT BATCH STATISTICS TO QR CODE : The QR code includes the date, the average and the standard deviation of the batch once you click on this button. Then just scan the QR code with your smartphone for example in order to collect those data

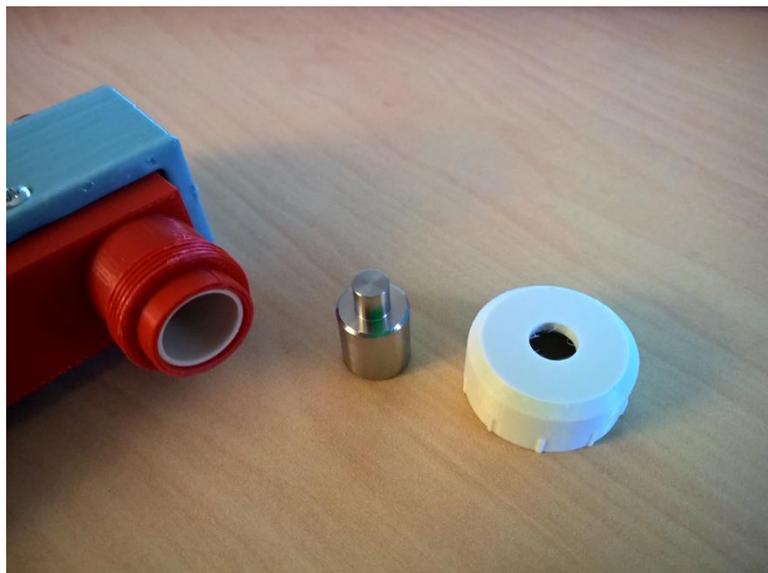
8/ USE BARCODE READER

Using BARCODE Reader is much simple : Just connect it to your computer, wait till it is recognized. It works like a Keypad, that will write the BARCODE data when you will click on the button

- Place the cursor of your mouse inside the BARCODE field
- Take the BARCODE Reader and read a BARCODE, the value appears in the field
- The 2 options :
 - o You can add the BARCODE as comment in the chart for future export to Excel
 - o Or you can give to your Excel file the name of your barcode using the second button

9/ CLEANING

- Unscrew the plastic abutment in order to access to the tip
- Remove the metal tip
- Clean tip and abutment with cold water and soap (If you use hot water, take care, the plastic abutment starts to become soft at 50°C)



10/ CHECK CALIBRATION

- Press the sensor firmly on a table, you should obtain 100%
- If you obtain less than 96%, contact Agrosta for re-calibration