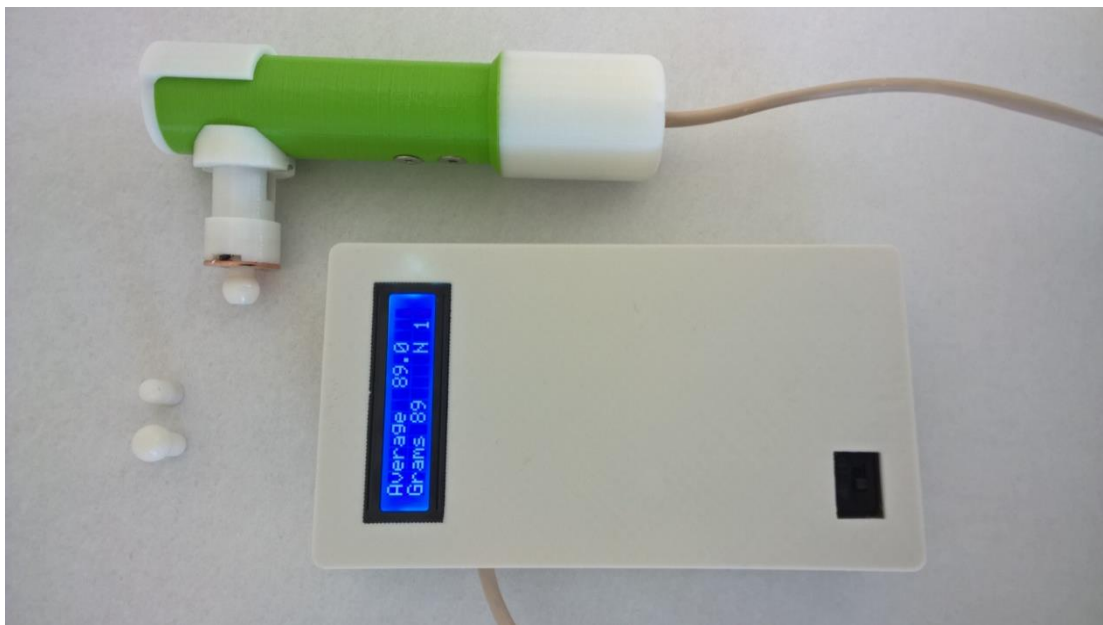


The Agrosta®Life 2 has been designed in 2016,
It is an Improvement of the Agrosta®Meat, designed to measure the firmness (hardness,
pressure, texture) of alive animals, human organs, meat, fat and muscles
It is a statistic instrument



Many thanks for having acquired an Agrosta instrument

Your package contains :

- A Box with the instrument itself
- A sensor connected to the instrument
- A certificate of conformity
- A manual
- 2 additional tips
- Requires 4 AA batteries not provided

The Agrosta®Life is provided with removable tips according to your requirements (2 tips) :

- Tip for women breast
- Tip for cows udders
- Tips for porc lounge
- Tip for alive birds
- Tip for chicken
- Tips for cooked meat
- Tip for beef meat
- Tip for beef fat
- Tip for medicine muscles
- Tip for medicine fat

Any tip according to specific requirements can be provided – Just describe the firmness of what you want to measure, and we will make it (specific veterinary research, specific organs..)



The AGROSTA®Life2 is entirely designed and assembled in France. The motherboard comes USA, the shield boards are made by DF Robot (LCD Screen) and the load cell comes from USA. Mechanical parts, design and calibration made in France by Agrosta

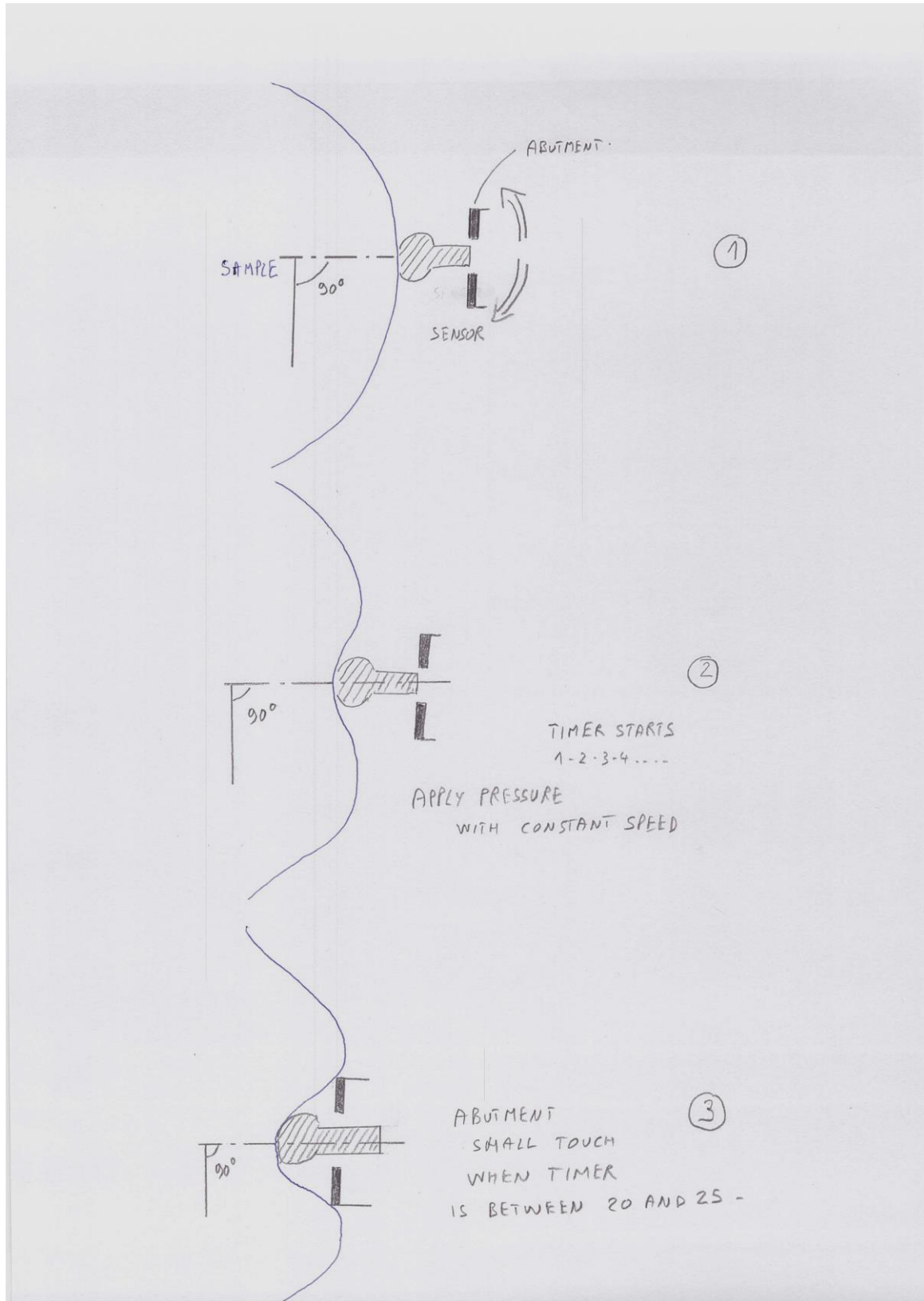
The AGROSTA®Life2 is not waterproof! It is a precision instrument; please take care to avoid dropping or knocking it.

The AGROSTA®Life2 has a two year guarantee from its date of shipment

- Minimum pressure : 50 grams (operation threshold)
- Maximum pressure : 2250 grams
- Resolution: +/- 1 gram
- Precision 1 gram



MEASUREMENT PRINCIPLE



- 1) Place the tip on the sample to be measured – Take care to the direction: The tip should be perpendicular to the sample in the 3 dimensions
- 2) Once the position is correct, start to press very slowly (And stay perpendicular). Once the pressure reaches 50 grams, a timer starts. Continue to press slowly, and try to reach the abutment once the timer is between 20 and 25
Try several times in order to keep a constant speed – You should not accelerate nor decelerate, but touch always for approx. the same value of timer
- 3) Once the abutment touches the sample, the pressure is recorded and displayed. You can remove quickly the tip from the sample, and make another measurement

The training and trials are very important, as shown on the following chart for which the sample was a woman breast:

During first trial, operators didn't push with a constant speed, and were not strictly perpendicular to the surface (Trials made with spherical tip)

Operator 2 has not been efficient, and should be trained again – Excluding Operator 2, the precision is around 1% with 5 measurements

3 Different operators testing the same sample :			
First trial before training			
	OPERATOR 1	OPERATOR 2	OPERATOR 3
Test 1 (grams)	141	144	144
Test 2 (grams)	124	112	139
Test 3 (grams)	130	127	134
Test 4 (grams)	115	137	143
Test 5 (grams)	120	146	150
Average	126	133.2	142
Standard dev	10.02	13.99	5.96
Second trial after training			
Test 1 (grams)	168	157	164
Test 2 (grams)	162	169	164
Test 3 (grams)	165	161	168
Test 4 (grams)	167	162	165
Test 5 (grams)	163	164	164
Average	165	162.6	165
Standard dev	2.55	4.39	1.73