

What's New ?

AlveoLab, SRC-CHOPIN, Mixolab 2

CHOPIN Technologies

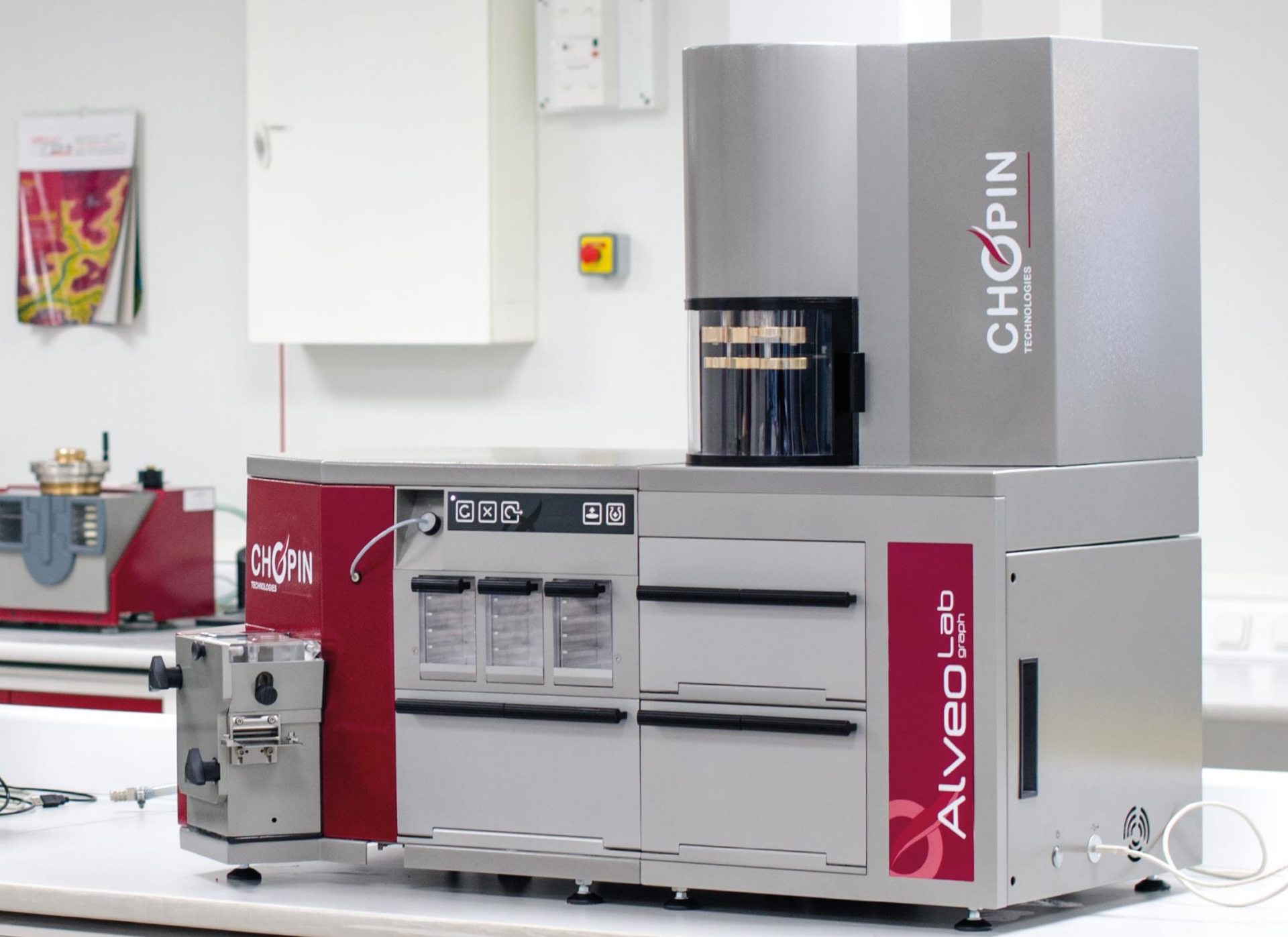
Geoffroy d'Humières



Alveo^{lab}
graph



ALVEO^{lab}
graph



CHOPIN
TECHNOLOGIES

CHOPIN
TECHNOLOGIES

Alveo Lab
Graph

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Very easy set-up!

- Installation requirements:
 - a computer (USB)
 - bench space
 - 220V
 - **No water cooling**



Automated water injection

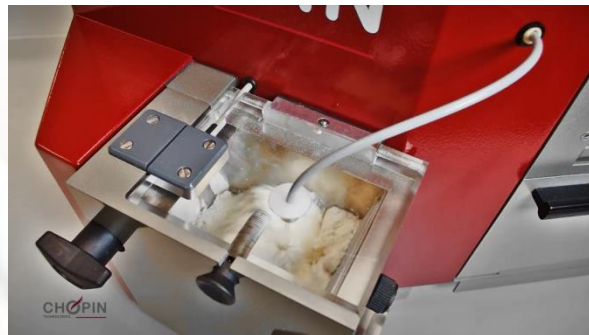
- Water volume is calculated based on moisture content given by the operator
- Water is added automatically and very accurately ($\pm 0.05\text{ml}$)
- Water temperature is also controlled

SampleMoisture %
Hydration %
Hydration basis B15% H2O

Water Quantity : **138,24** mL

Water type : salted
Salt content : 25

Flour weight : **250** g



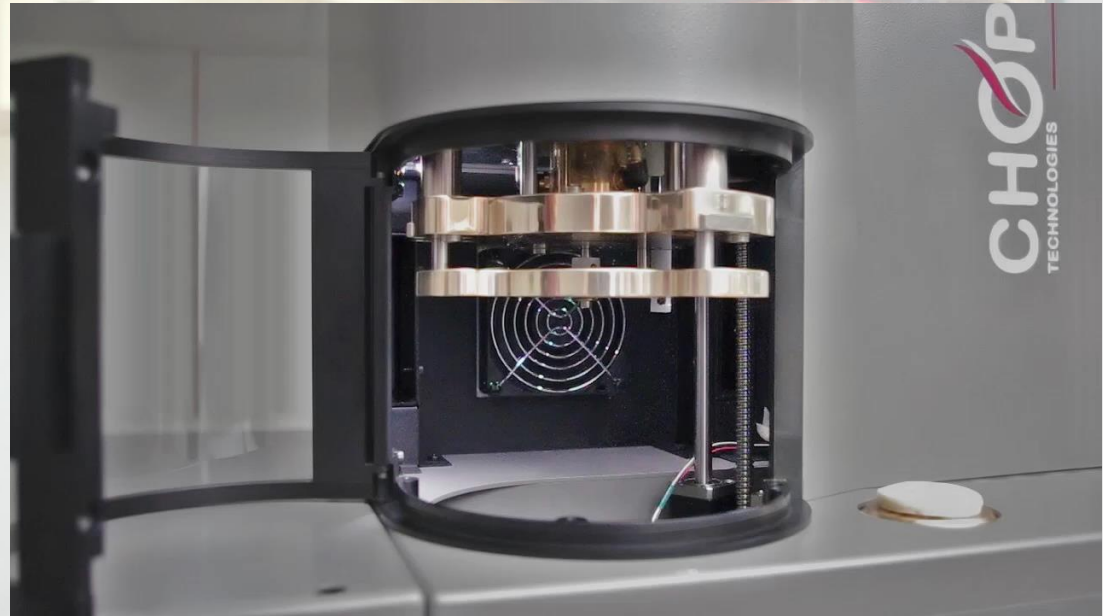
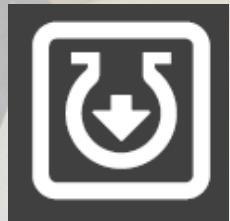
Improved dough patties preparation

- New resting plates with anti-adhesive coating
- New semi-automatic dough cutter
 - Easier preparation of dough patties



Blowing bubbles has never been easier!

- Fully automated



- Temperature and humidity are regulated
→ no impact of the lab conditions!

How much more accurate is it?

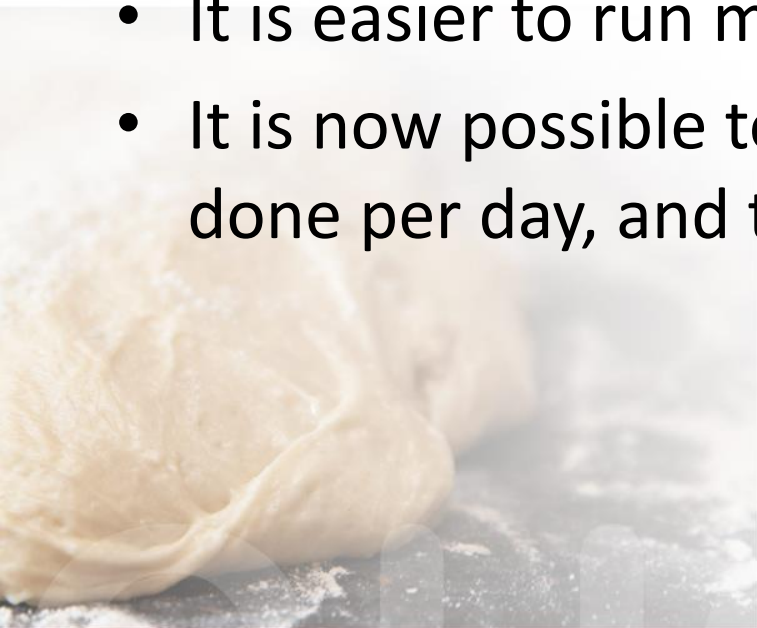
	Repeatability		Reproducibility	
	Alveolab (CVr)	Alveograph (CVr)	Alveolab (CVFi)	Alveograph (CVR)
P	2%	3.7%	3%	9.3%
L	7%	8.2%	7%	11.9%
G	3%	4.2%	3.5%	6.4%
W	5%	5.9%	5%	8%
P/L	7.7%	8.5%	8.4%	17.4%
le	0.8%	-	1%	-

Alveolab Fidelity data - Arvalis – September 2013 | Alveograph Fidelity data - NF EN ISO 27971

- Full and complete data will be available in 2015 (worldwide ring test)

Make more Alveograph tests!

- Gain in accuracy is even more important with operators with limited experience
- It is now easier and quicker to become fluent with the Alveograph test
- It is easier to run multiple tests at the same time
- It is now possible to increase the number of tests done per day, and therefore to maximize ROI



Innovations to get the most out
of your Alveograph

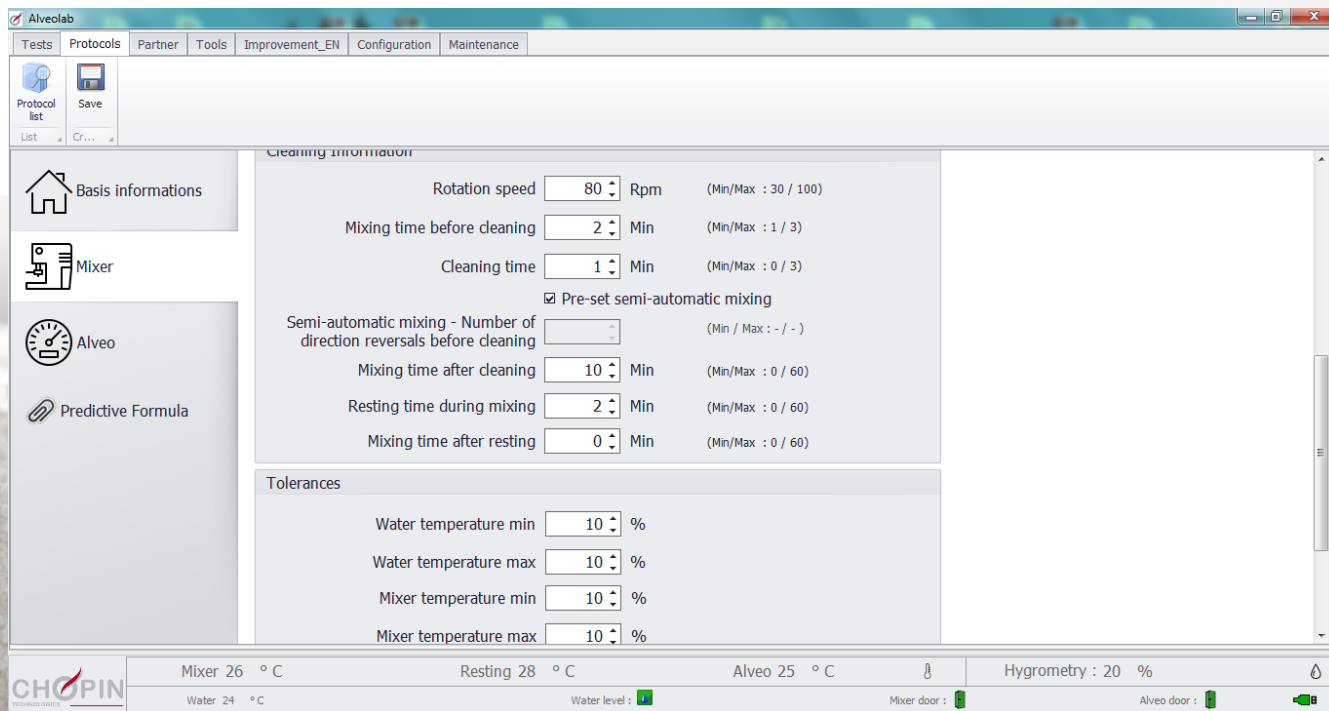
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new protocols & results



Standard and new protocols

- Alveo CH, Alveo AH, Consistograph, Degradation, Relaxation... are included in the software
- All types of wheat (soft, hard, durum) can be tested under optimal conditions that correspond to their use in the industry.



The screenshot displays the Alveolab software interface. The window title is "Alveolab" and the menu bar includes "Tests", "Protocols", "Partner", "Tools", "Improvement_EN", "Configuration", and "Maintenance". The left sidebar contains icons for "Protocol list", "Save", "Basis informations", "Mixer", "Alveo", and "Predictive Formula". The main area is divided into "Cleaning information" and "Tolerances".

Cleaning information

Rotation speed	80	Rpm	(Min/Max : 30 / 100)
Mixing time before cleaning	2	Min	(Min/Max : 1 / 3)
Cleaning time	1	Min	(Min/Max : 0 / 3)
<input checked="" type="checkbox"/> Pre-set semi-automatic mixing			
Semi-automatic mixing - Number of direction reversals before cleaning			(Min / Max : - / -)
Mixing time after cleaning	10	Min	(Min/Max : 0 / 60)
Resting time during mixing	2	Min	(Min/Max : 0 / 60)
Mixing time after resting	0	Min	(Min/Max : 0 / 60)

Tolerances

Water temperature min	10	%
Water temperature max	10	%
Mixer temperature min	10	%
Mixer temperature max	10	%

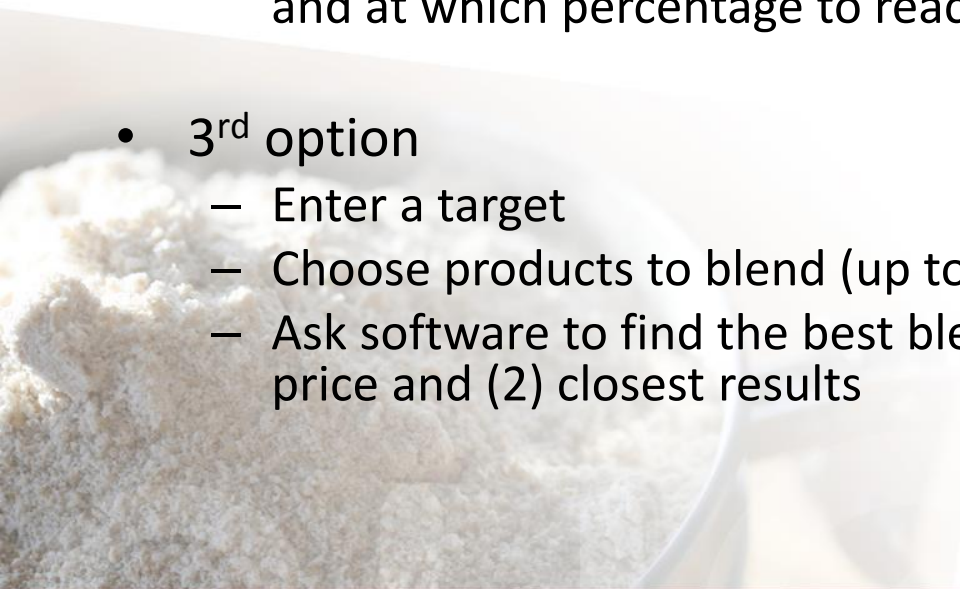
The status bar at the bottom shows: Mixer 26 °C, Resting 28 °C, Alveo 25 °C, Hygrometry : 20 %, Water 24 °C, Water level : [green bar], Mixer door : [green bar], Alveo door : [green bar].

New key features on the
software



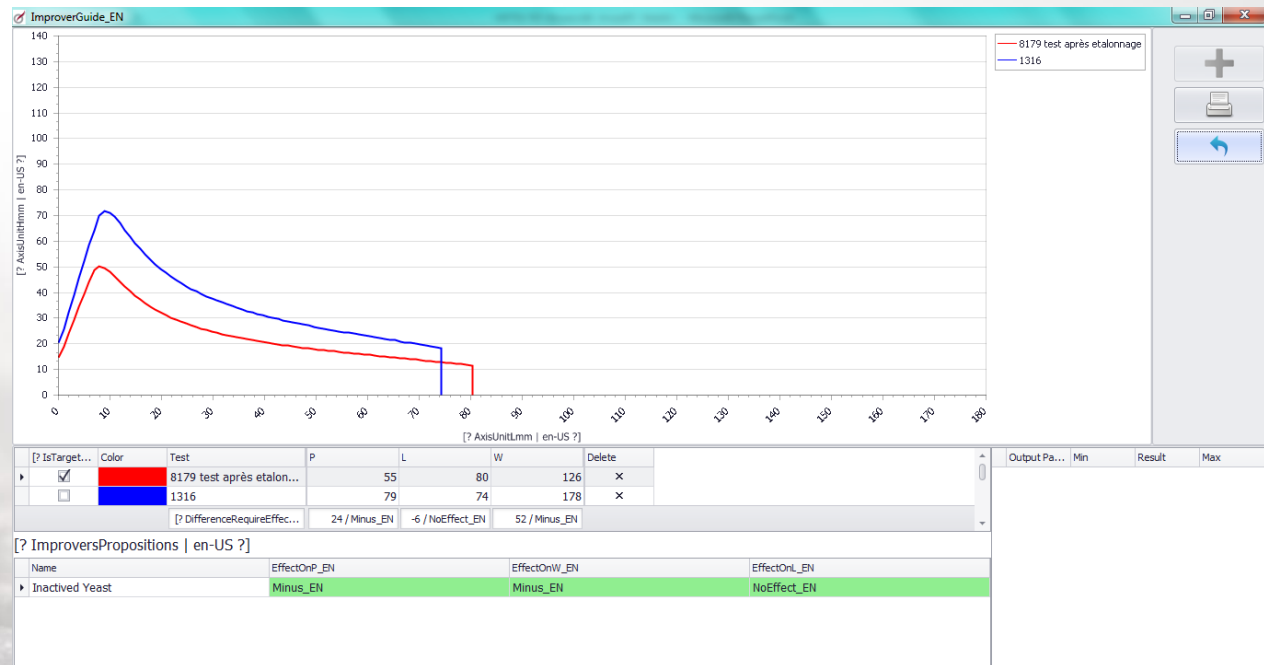
Help in finding the best blends

- 1st option
 - Select different products and enter % of incorporation
 - Ask software to calculate resulting Alveograph values for this blend
- 2nd option
 - Enter a target and select a product
 - Ask software to find in your database the "missing product" to blend and at which percentage to reach the target
- 3rd option
 - Enter a target
 - Choose products to blend (up to 5)
 - Ask software to find the best blend = blend with (1) most affordable price and (2) closest results



Find the most appropriate additive

- Open a test
- Select a target/reference curve
- Software gives you the most appropriate additive to use



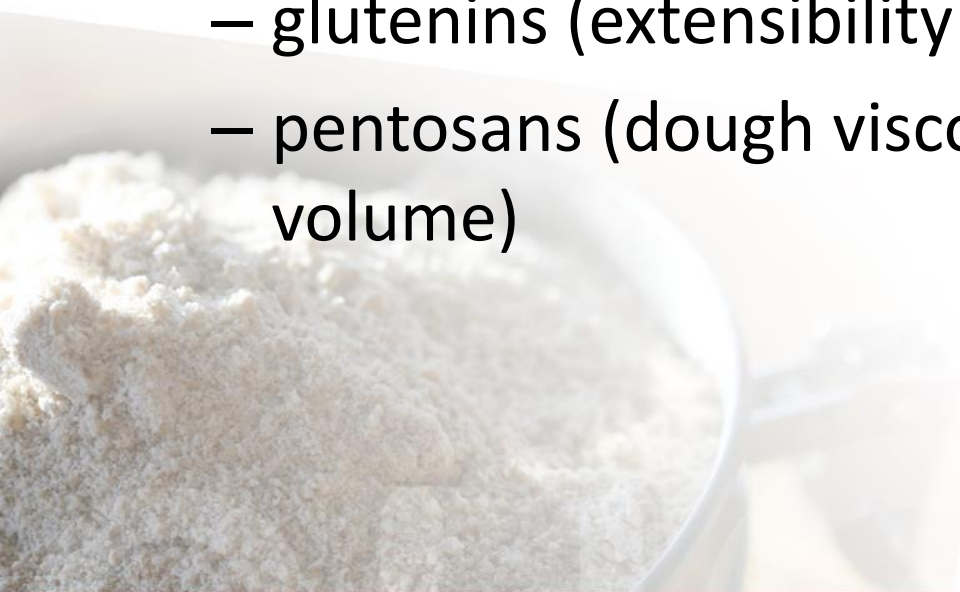
SRC-CHOPIN



CHOPIN

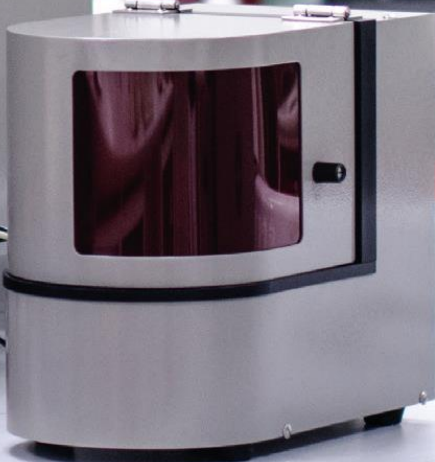
SRC benefits

- Use a single test to analyze the main functional components that directly influence the quality of the final product:
 - damaged starch (dough stickiness)
 - glutenins (extensibility and elasticity)
 - pentosans (dough viscosity and final product volume)



CHOPIN
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SRC - CHOPIN

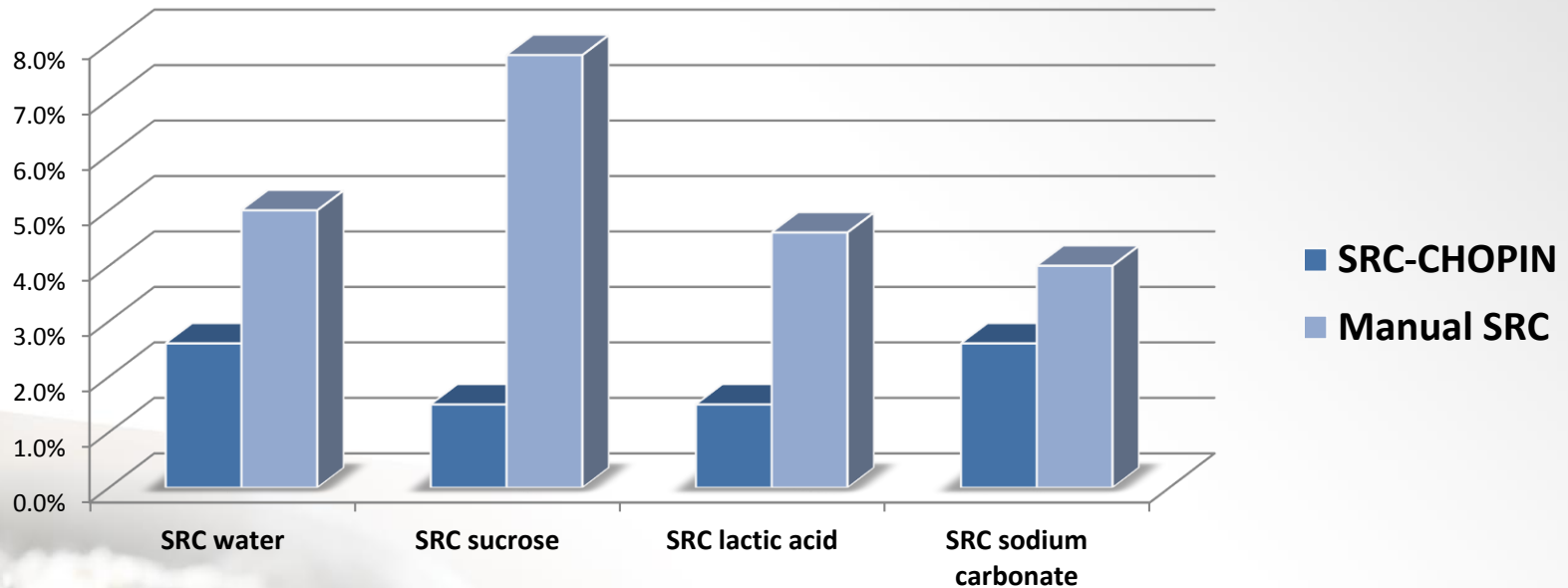


Introduction video



How much more accurate is it?

Coefficient of variation (%)
(lower is better)

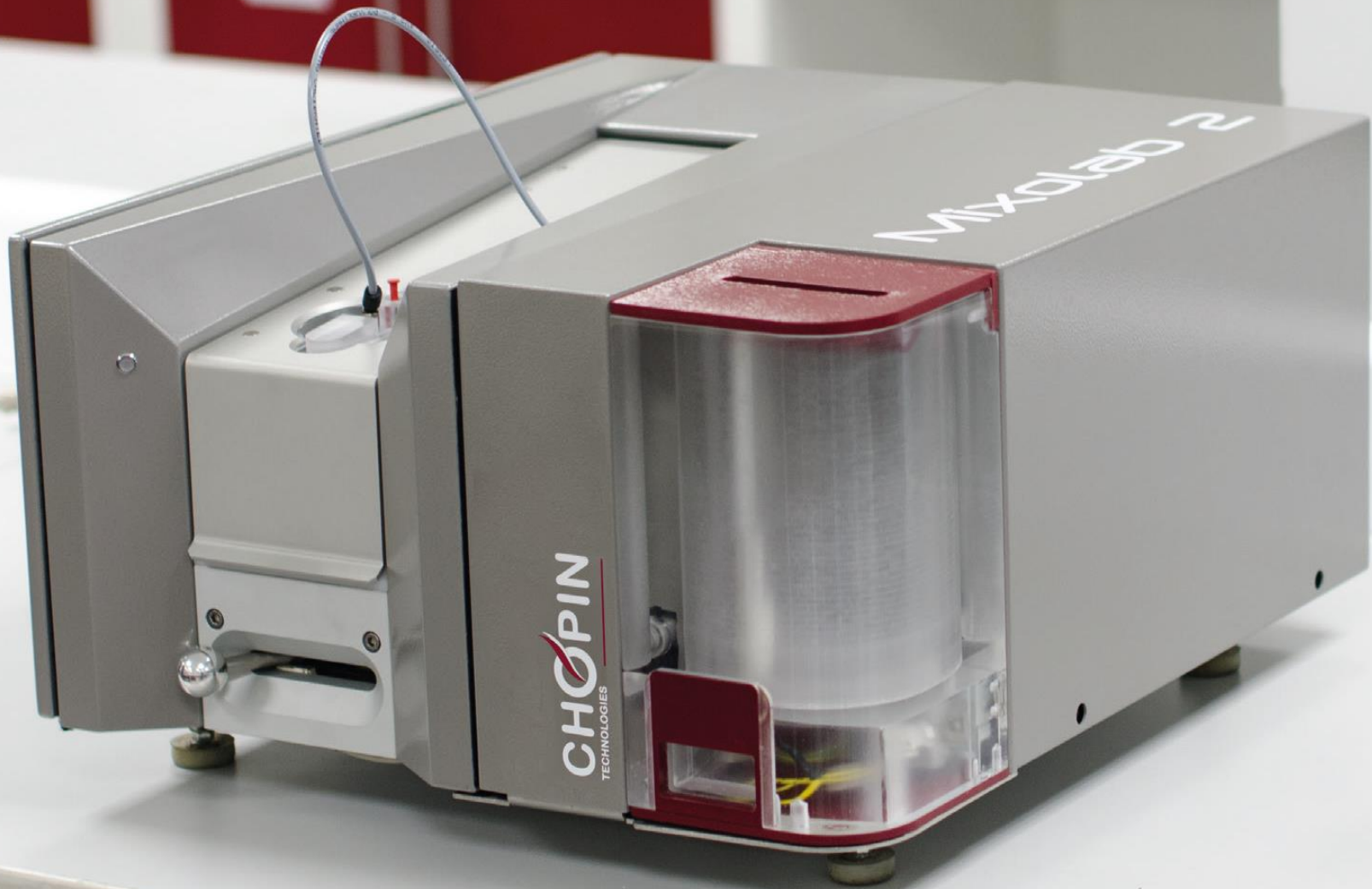


- SRC-CHOPIN is 3 times more accurate

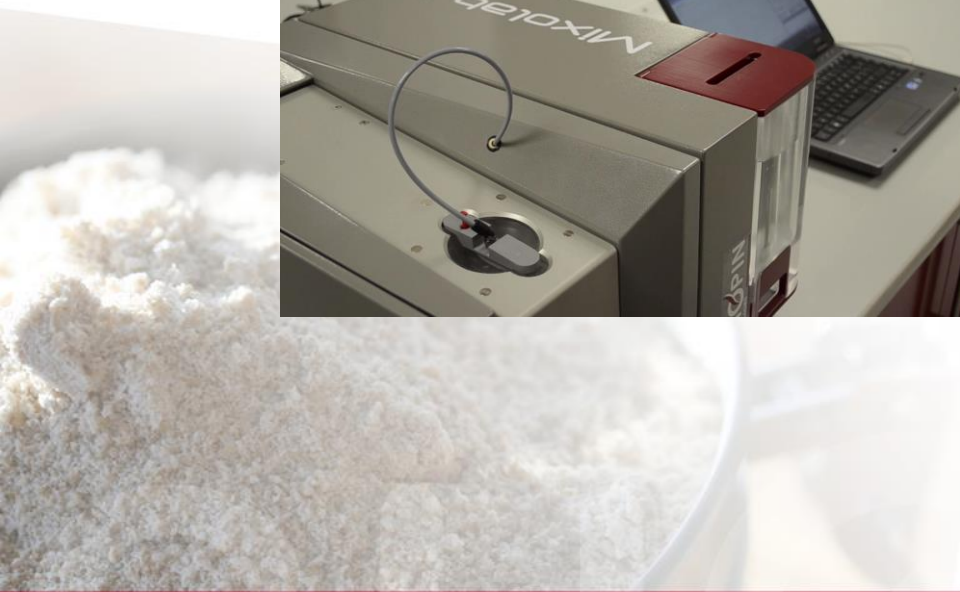
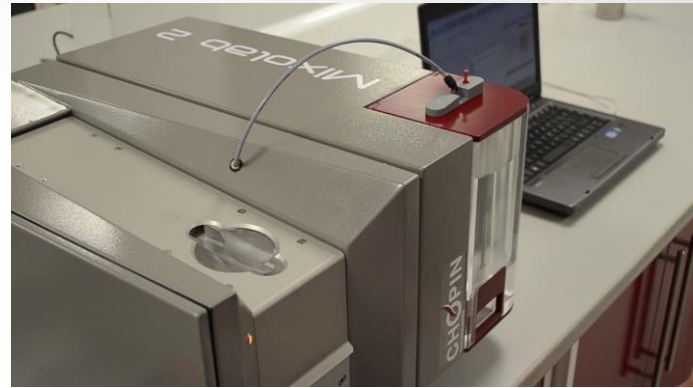
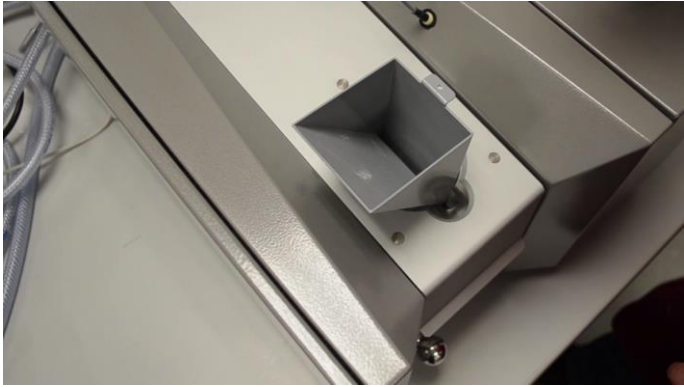
Mixolab 2

Made easier and better!



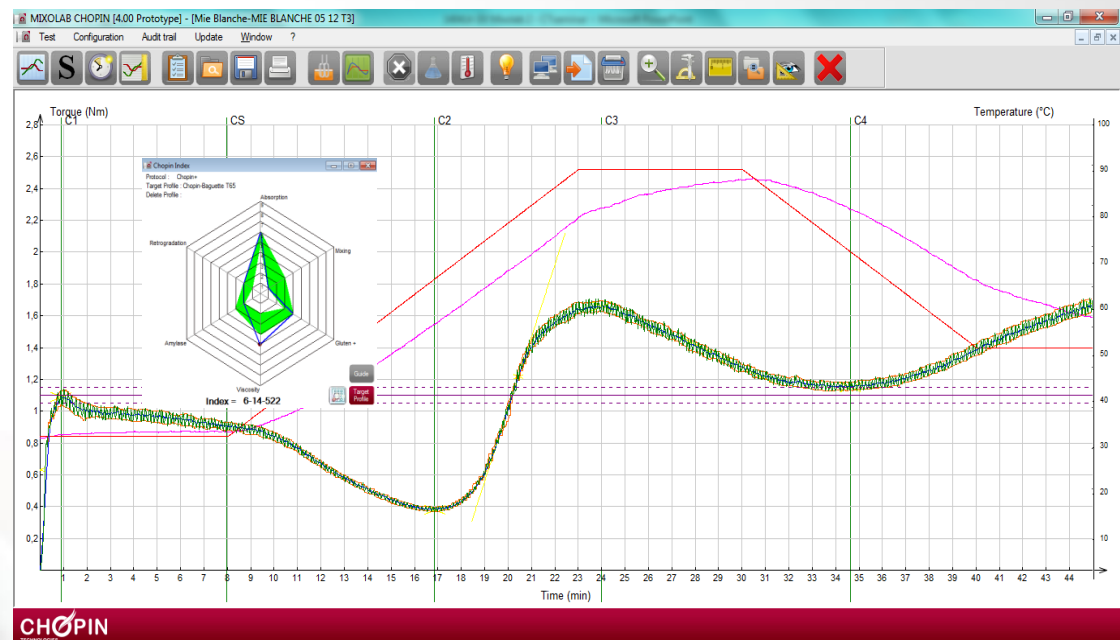


Extremely easy to operate



Measurement principle = added value

The Mixolab 2 measures the characteristics of dough during mixing (water absorption, development time, stability, etc..) while evaluating the quality of protein and starch.



User benefits:

By heating up and cooling down the dough in one test, you have the most complete dough rheology analysis.

Innovations on the instrument

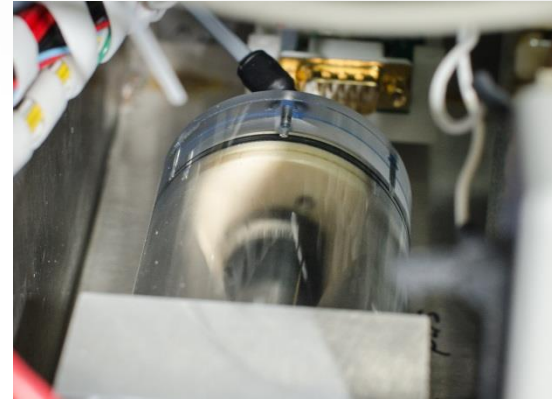


New water addition system

- **New, easy to remove, water tank**



- **New automated water injection system: 75ml dosing syringe (+/- 0.02ml)**



- **User benefits:**

- Clean, fill, empty very quickly and easily

- **User benefits:**

- Accurate, higher hydration possible, add water in up to 10 fractions

Innovations on the software

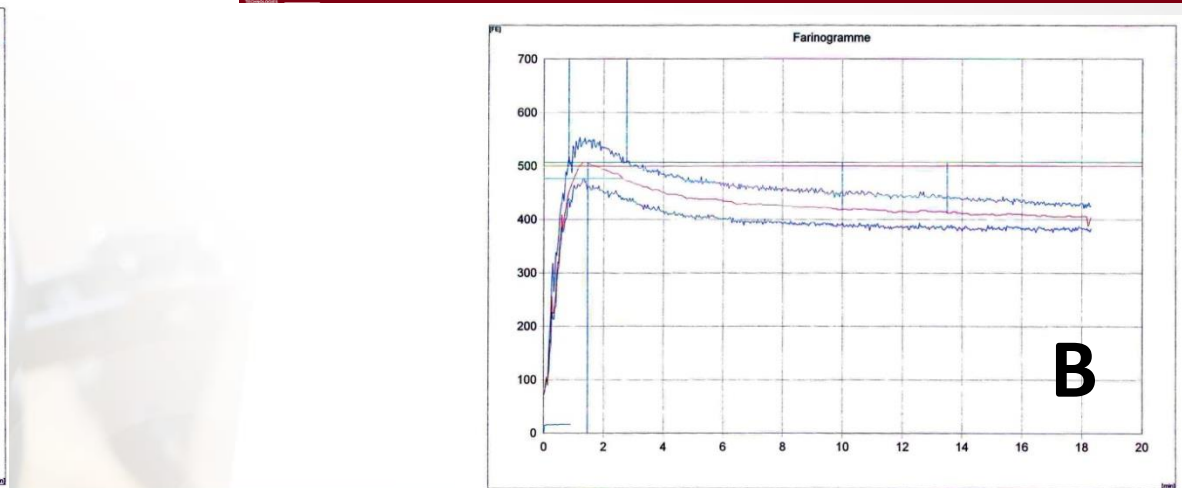
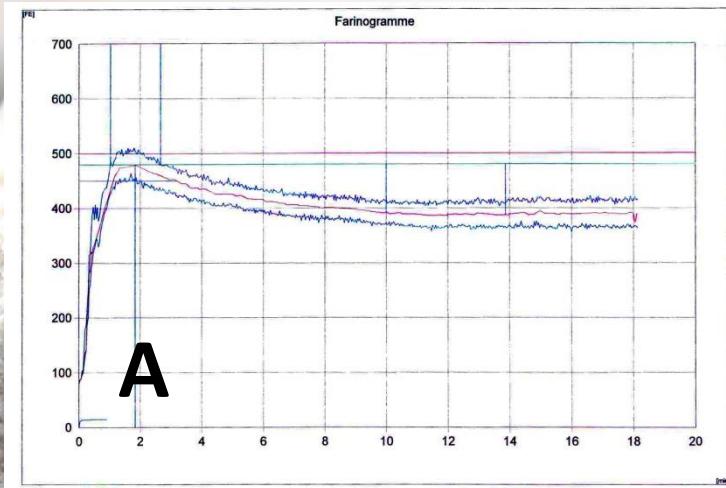
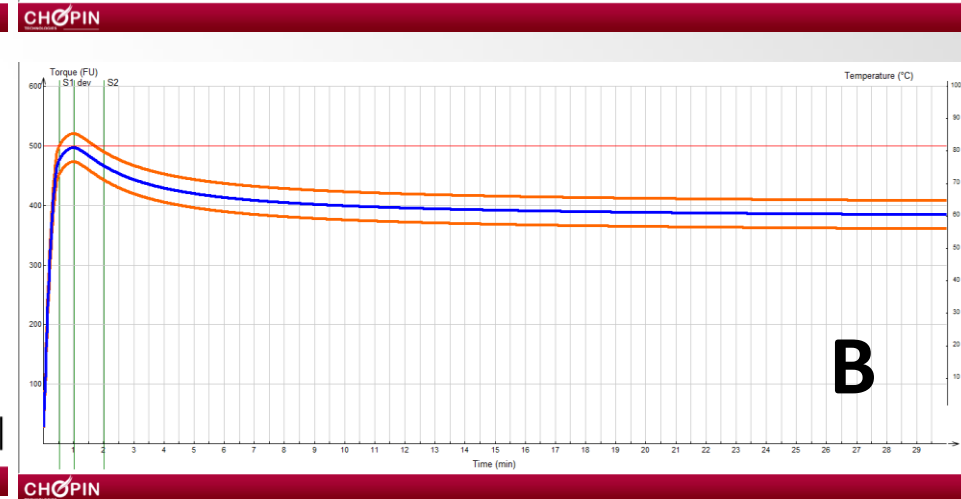
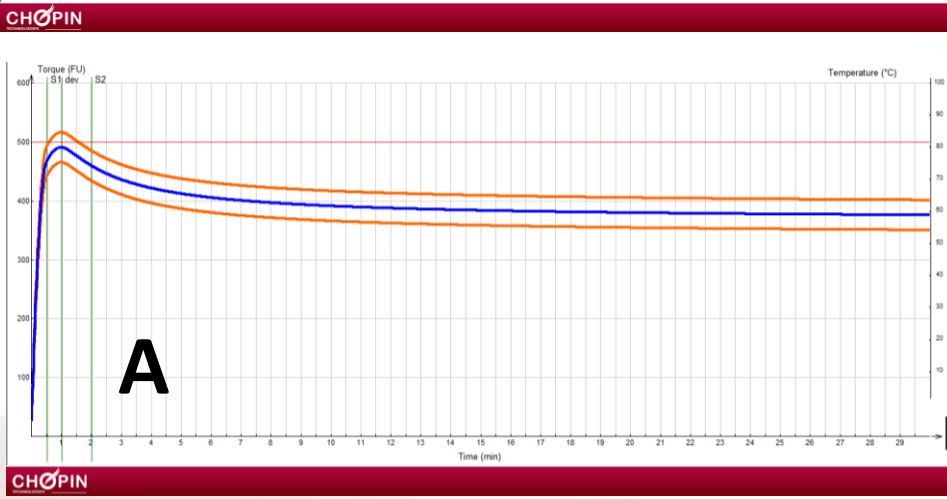
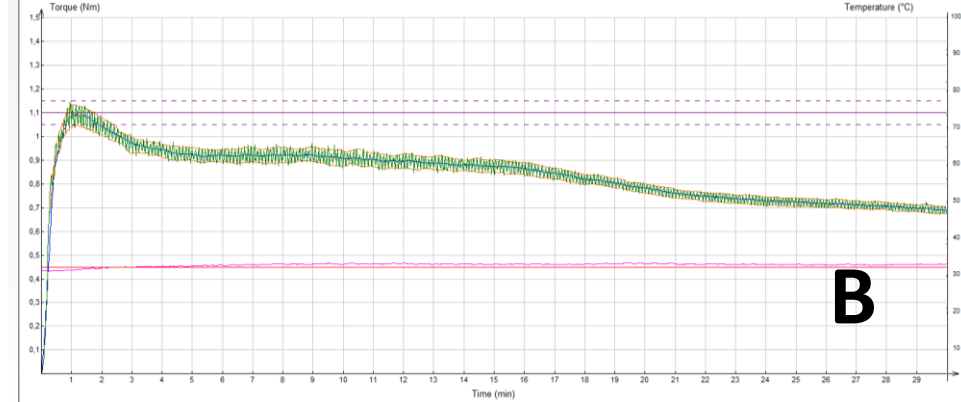
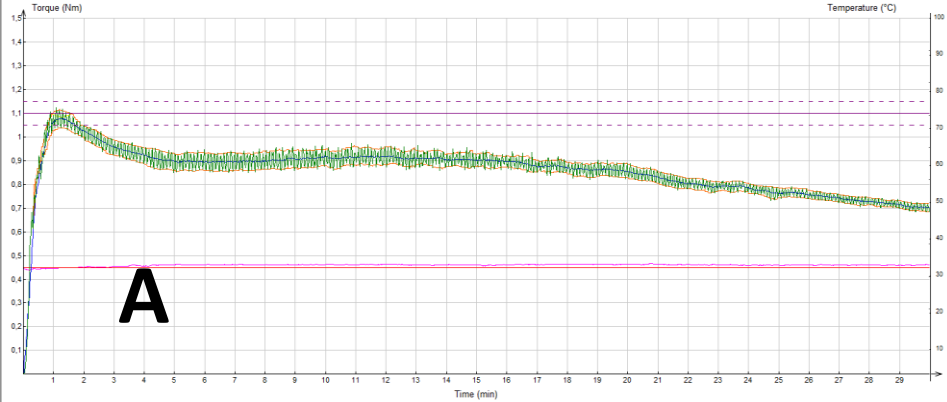


Simulator

to get similar results as Farinograph

- **Mixolab "Farinograph mode" curve**
 - **Theoretical Farinograph curve drawn by the software**
 - **Farinograph values: Water absorption, Development time, Stability, Weakening**
 - **Dev. time, stab., weak. values can be read on the curve.**



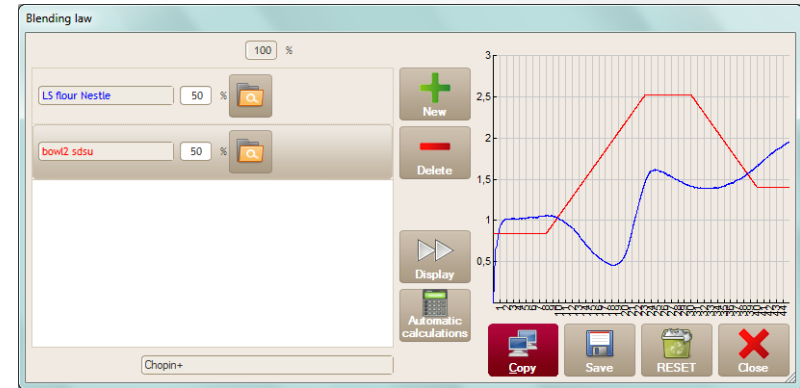
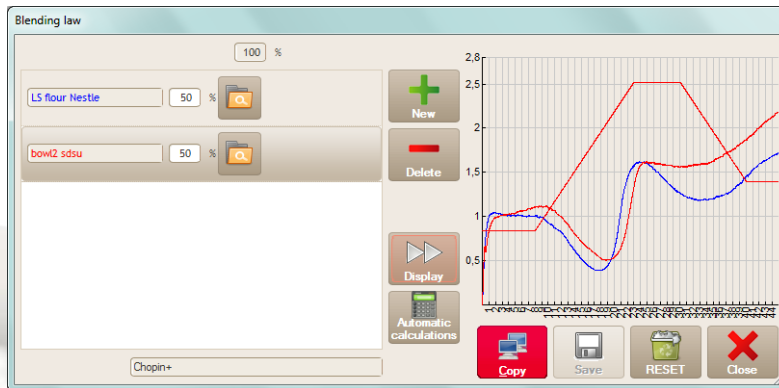


Automatically calculate results of flour blends



- **Principle:**

- Select the results from different samples
- Indicate % to blend for each sample
- Software calculate and save the resulting theoretical curve



- **User benefits:**

- Save time by not testing flour blends

- **Rules:**

- Same protocol - Up to 10 flours to blend

In a few words

- **The Mixolab 2 keeps the exact same measurement principle**
- The Mixolab 2 brings more features to the customer while making it even more simple to run
- The Mixolab 2 arrives together with a new software
- **Software [4.00] fully compatible with all Mixolab!**
 - All new features available except hybrid protocol, full calibration and addition of water in different fractions

Thank you
for your attention

