

BRABENDER

**2023 Southeastern, Niagara, Ohio Valley &
Wolverine Joint District Conference**

September 27-29, 2023

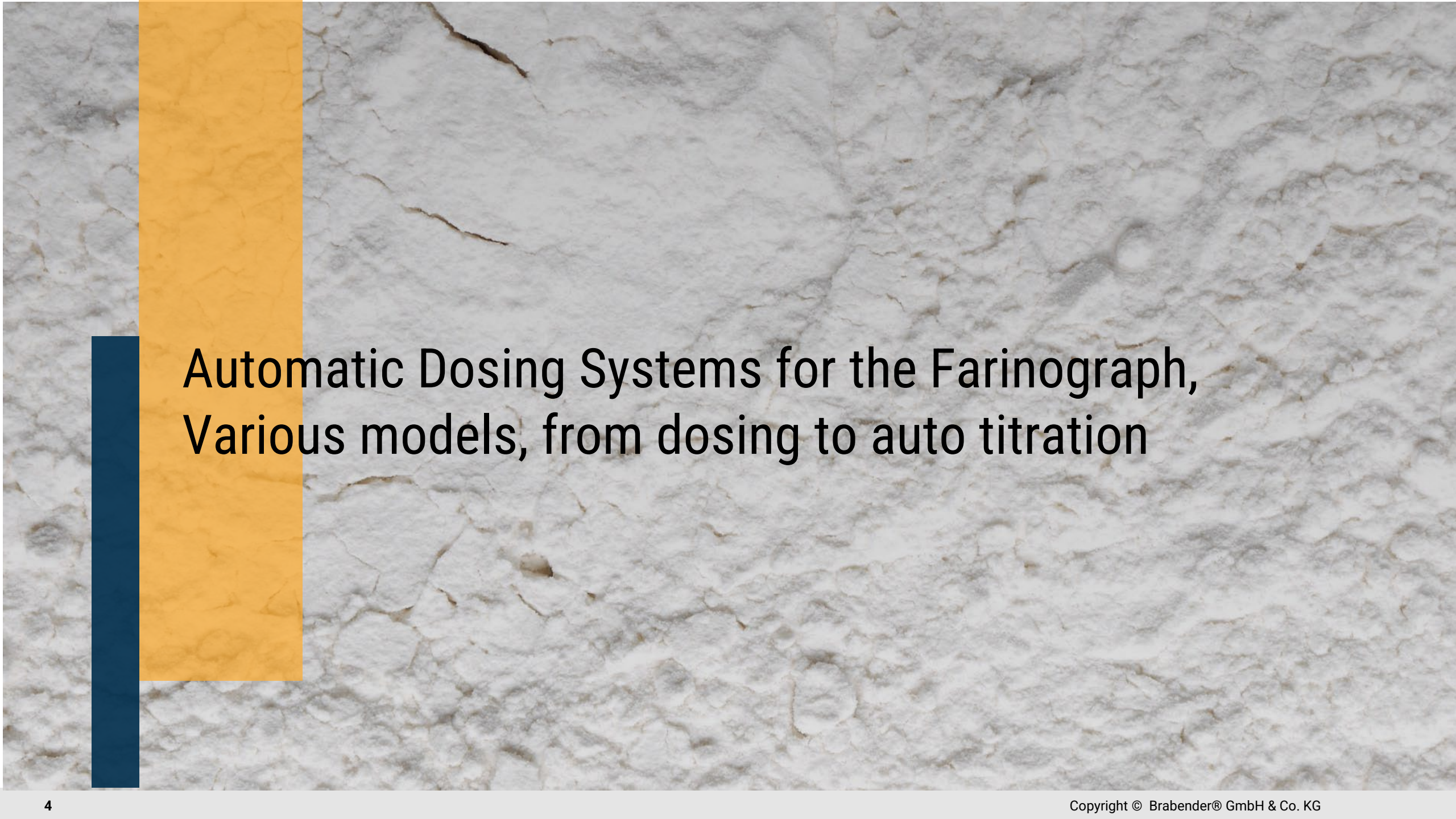
The Westshore Grand Hotel

4860 W. Kennedy Blvd. Tampa, FL

Topics of discussion

- **Farinograph models**
- **Aqua-Injects**

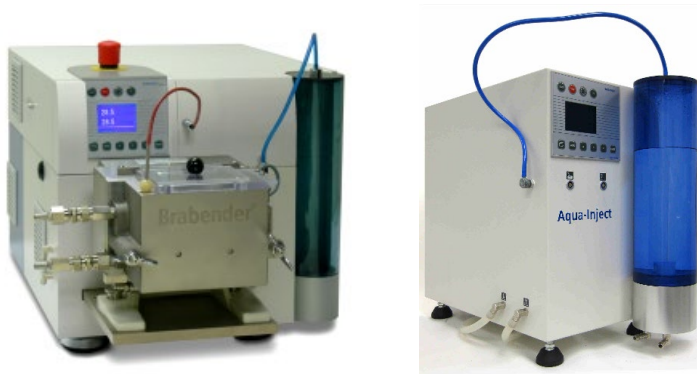
- **Farinograph (vintage scalehead type), mechanical**
- **Farino/Resistograph (various models), mechanical**
- **Farinograph-E (various models of the E) (can work with AI)**
- **Farinograph-AT (built-in dosing system)**
- **Farinograph-TS (works with AI)**
- **3 Aqua-Injects models**



Automatic Dosing Systems for the Farinograph, Various models, from dosing to auto titration

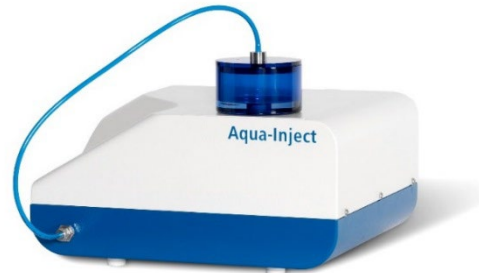
History and Versions

Farinograph-AT / Aqua-Inject



2010 - 2019

Aqua-Inject



2016 – 2022

AquaInject



Starting 2022

Benefit of the new Aqualnject

- ✓ Supporting 300 g and 50 g mixers
- ✓ Processing of titration curves
- ✓ Two speed mode (200 + 600 ml/min)
 - Automatic speed selection when the mixer is selected
 - Manual selection when dosing for other applications (e.g. P600)
- ✓ Use for other equipment possible (e.g. 105 ml for ViscoQuick)
- ✓ Stepless water level display
- ✓ Built-in power supply
- ✓ No external thermostat required for heating the titration water

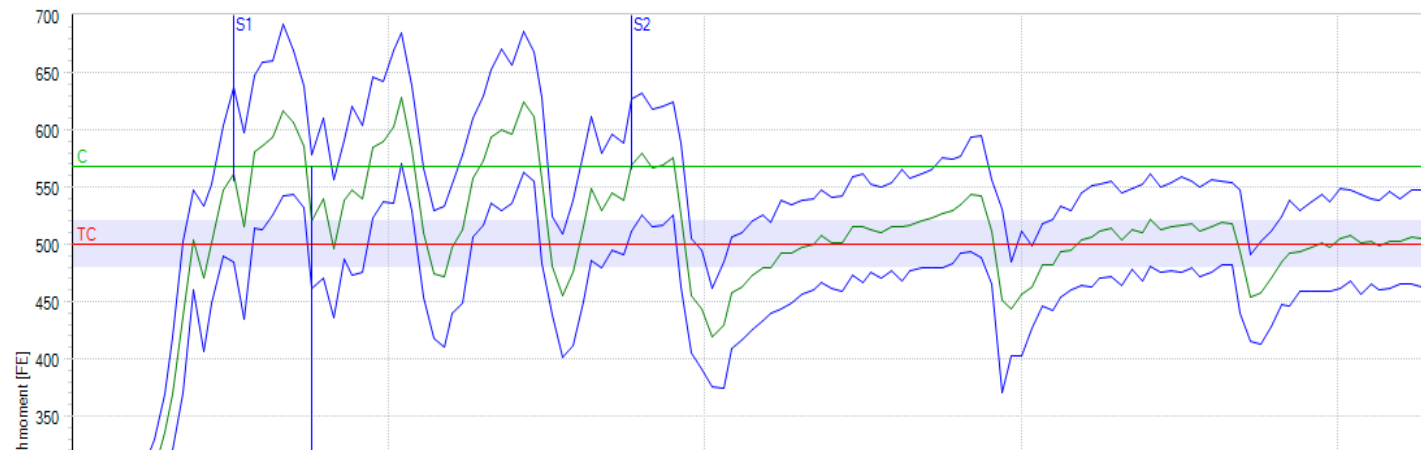
BENEFITS



Application Automatic Titration Curve

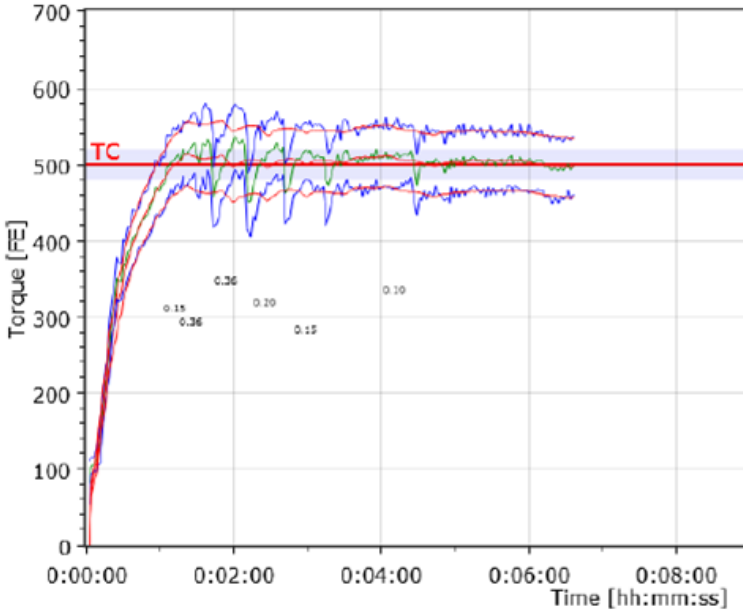
Finding of the right water absorption by using an automatic dosing system

- ✓ No influence by the user (Independent process)
- ✓ No incorrect reading of the burette
- ✓ Complete documentation of the titration in the software
- ✓ Time saving (No need to monitor the dosage)



Application Automatic Titration Curve - Example

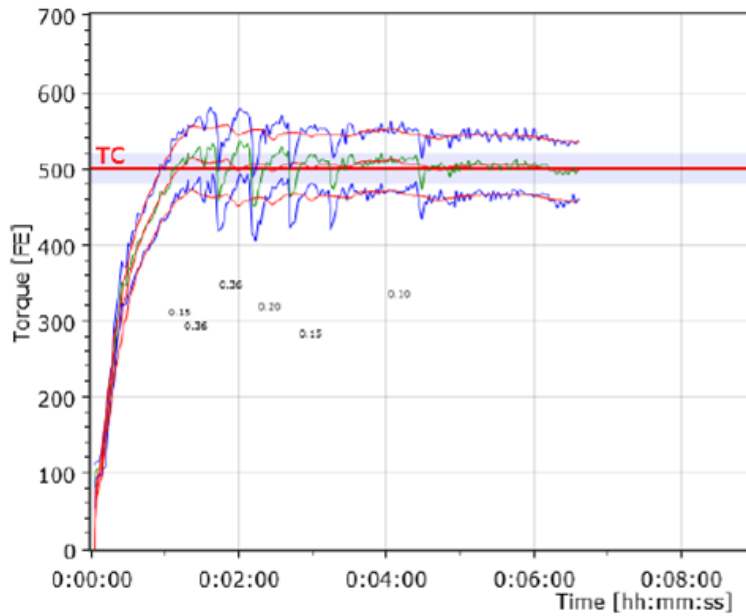
One wheat flour – various starting dosages



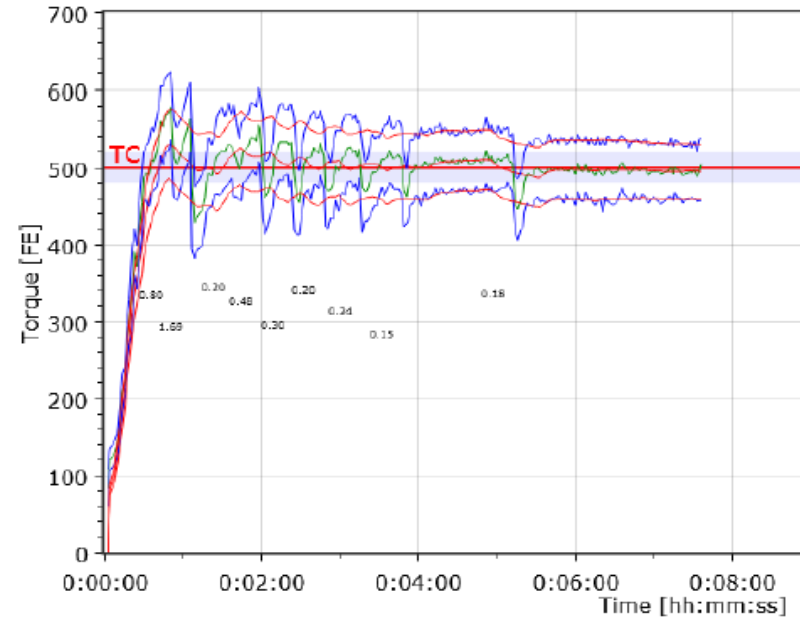
Point	Value	Unit	Description
WS	56.0	%	Water added at measurement start
WP	57.3	%	Predicted water absorption

Application Automatic Titration Curve - Example

One wheat flour – various starting dosages



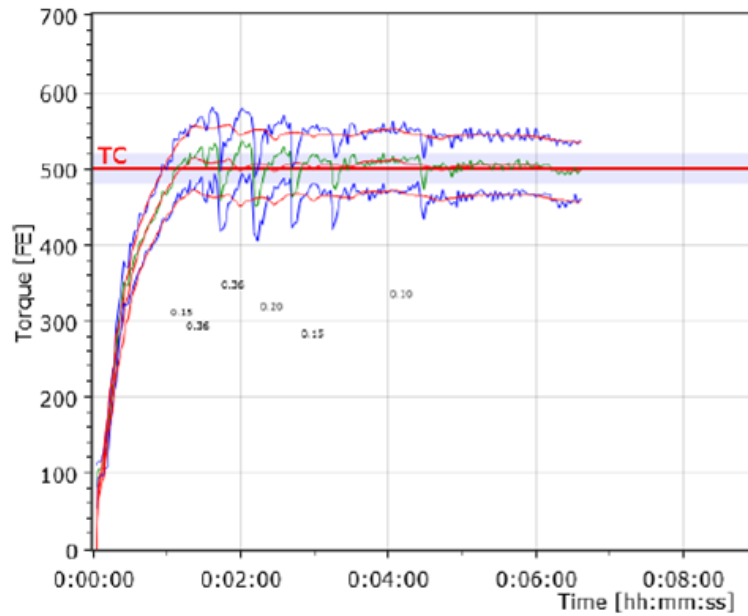
Point	Value	Unit	Description
WS	56.0	%	Water added at measurement start
WP	57.3	%	Predicted water absorption



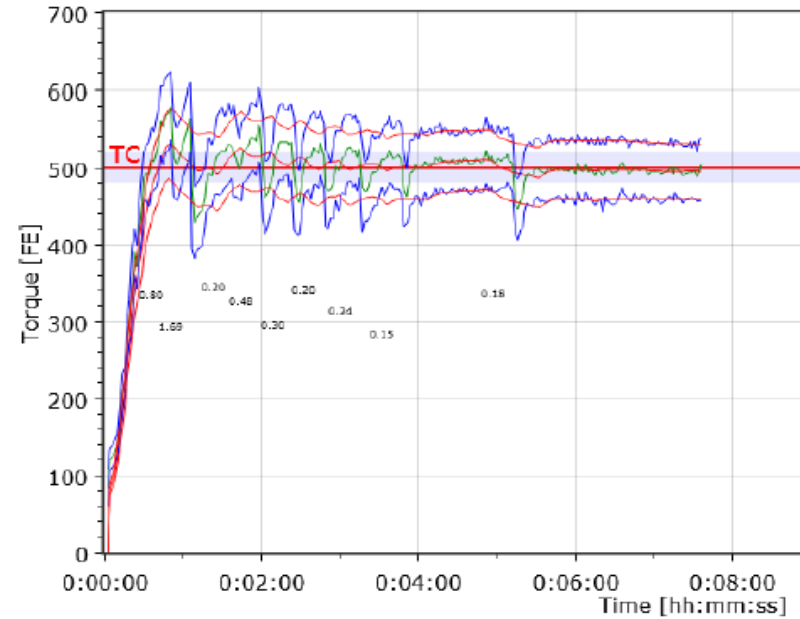
Point	Value	Unit	Description
WS	53.0	%	Water added at measurement start
WP	57.2	%	Predicted water absorption

Application Automatic Titration Curve – Example

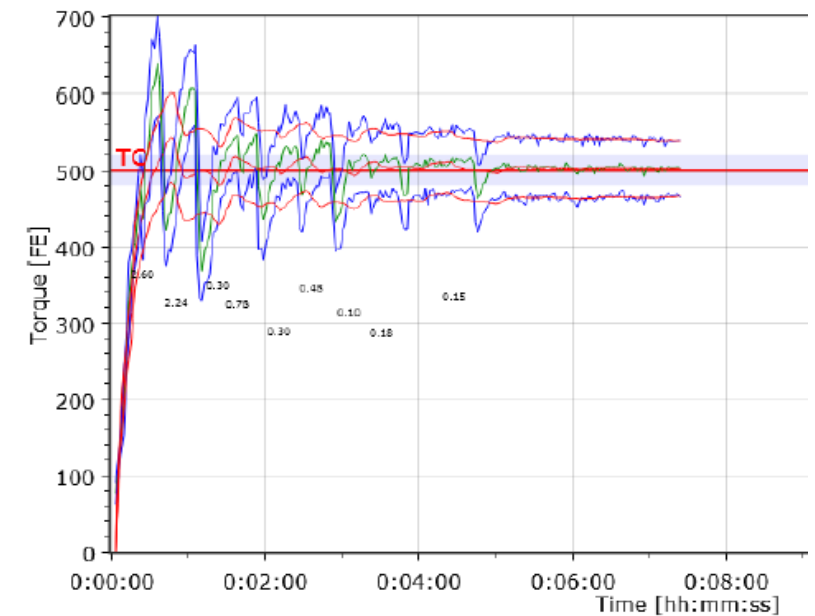
One wheat flour – various starting dosages



Point	Value	Unit	Description
WS	56.0	%	Water added at measurement start
WP	57.3	%	Predicted water absorption



Point	Value	Unit	Description
WS	53.0	%	Water added at measurement start
WP	57.2	%	Predicted water absorption



Point	Value	Unit	Description
WS	50.0	%	Water added at measurement start
WP	57.1	%	Predicted water absorption

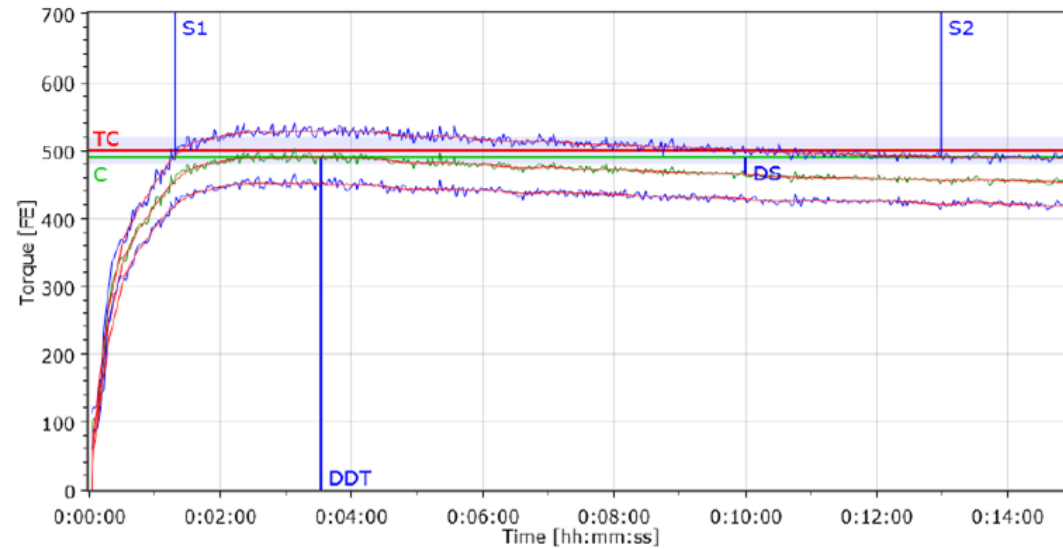
Application Automatic Titration Curve - Summary

High accuracy

WS	WP
50,0	57,1
53,0	57,2
55,0	57,3
56,0	57,3
57,4	57,2

WS – Water Start

WP – Water Prognosis



Point	Value	Unit	Description
T	00:15:00	hh:mm:ss	Measuring time
DT	28.5	°C	Dosing temperature
DDT	00:03:32	hh:mm:ss	Development time
C	490	FE	Consistency
WZ	57.4	%	Water added
WAC	57.2	%	Water absorption corr. for default consistency

Questions?

Visit the Brabender Tabletop

Thank you!

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