



IAOM Meeting – Nairobi, 2018

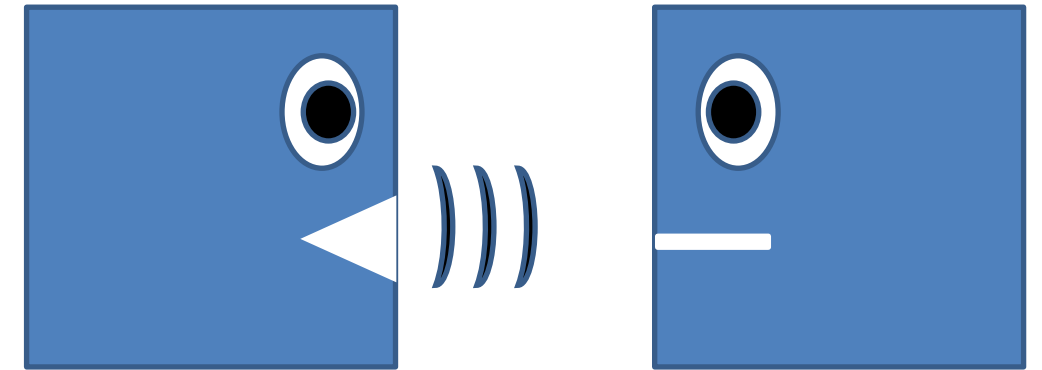
New Solutions to Automate and Optimize Quality Control and Lab Analytic

29th ANNUAL IAOM Mideast & Africa Conference & Expo | 22-25 October
2018 Jürgen Willmann | Sales Director Food Division

...where quality is measured.

Brabender®

- ✓ Automatic data transfer
- ✓ Centralized information
- ✓ User-friendly
- ✓ Efficient



Brabender® Smart Workflow

Integrated communication between instruments

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Brabender® Smart Workflow

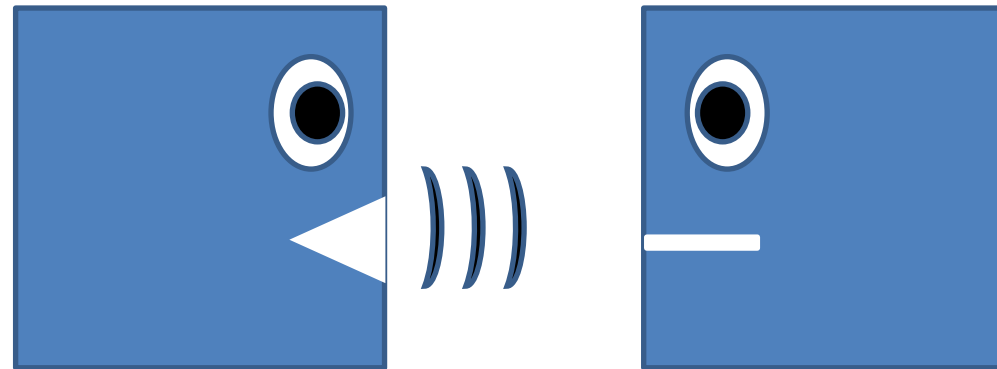
Integrated communication between instruments

What is meant by “Smart Workflow”?

Smart Workflow is a new concept which links Brabender instruments with each other.

The interconnection of devices provides several benefits:

- ✓ Enhanced usability
- ✓ High accuracy
- ✓ Time-saving
- ✓ Cost-saving



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Brabender® Smart Workflow

Integrated communication between instruments

Which and how many Brabender instruments can be linked?

The Smart Workflow concept is available for all Brabender instruments which are driven by the Brabender MetaBridge Software.

Instruments with MB as their standard software:



Farinograph-TS



MT-CA



ViscoQuick



TwinLab-F 20/40

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Brabender® Smart Workflow

Integrated communication between instruments

Which Brabender instruments can be linked?

The Smart Workflow concept is available for all Brabender instruments which are driven by the Brabender MetaBridge Software.

Instruments with standard USB connection, linked to the MetaBridge Controller, e. g.:



Farinograph-E / AT



GlutoPeak



Extensograph-E



Amylograph-E

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Brabender® Smart Workflow

MetaBridge Software: Benefits at a glance

The Brabender MetaBridge brings you a number of worthwhile benefits:

- ✓ Time-saving: web based software eliminates the need for local installation
- ✓ Mobility: fast access from anywhere in the world and through any type of end device, with automatic adjustment of the screen display
- ✓ Internal communication: multi-access by different users with one operator
- ✓ User-friendliness: Touch screen control, customizable interface
- ✓ High recognition: same interface for all end devices
- ✓ Fast problem solution: instant remote access by a Brabender service technician



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Brabender® Smart Workflow

MetaBridge Software

The Brabender MetaBridge makes your workflow smart:

- ✓ Brabender instruments linked with each other
- ✓ Quick and simultaneous access to multiple devices
- ✓ Automatic data transfer (e. g. moisture content, water absorption)
- ✓ Centralized information
- ✓ LIMS and Industry 4.0 connectivity

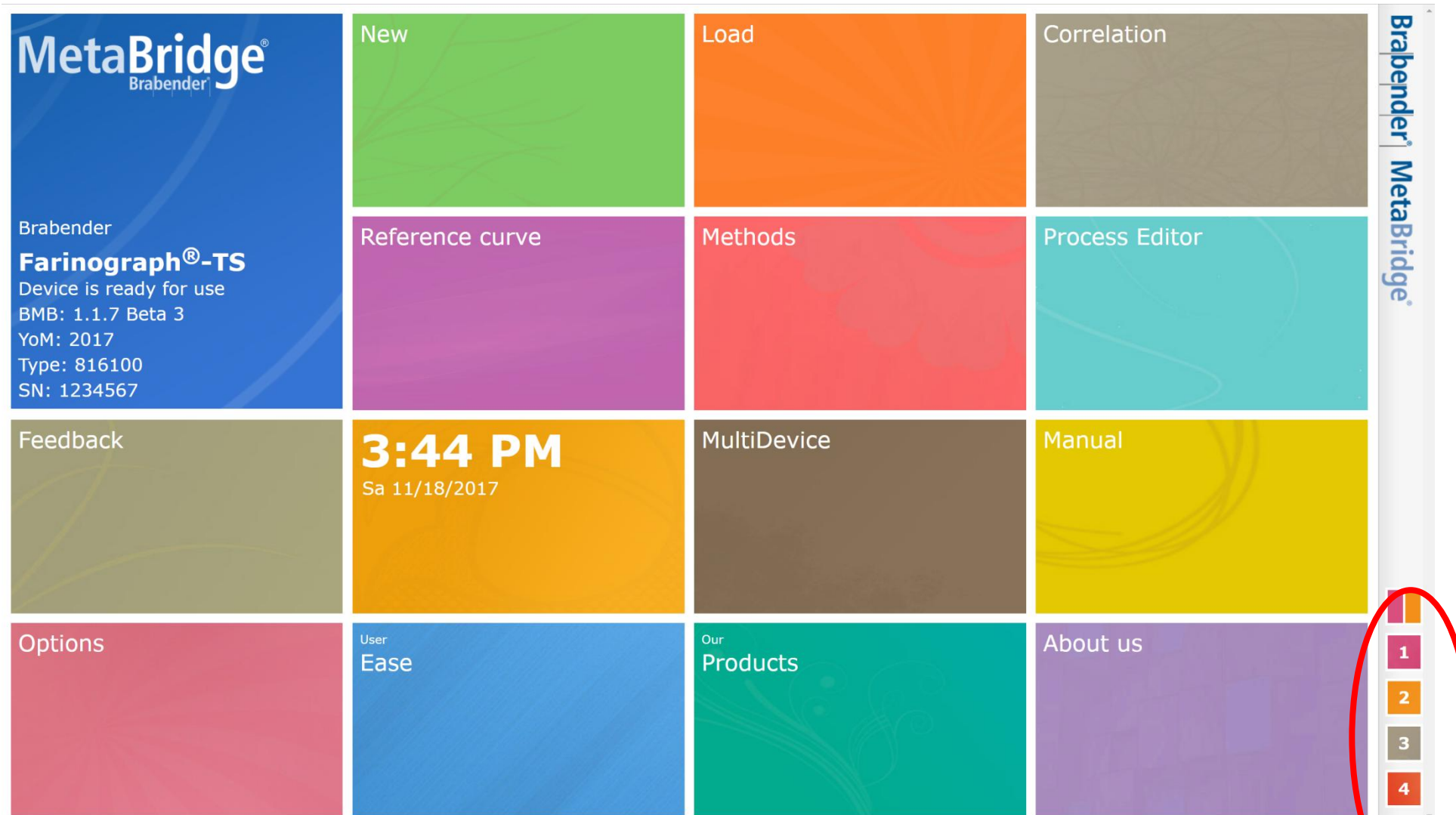


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Brabender® Smart Workflow Features

MultiDevice: Fast access to multiple instruments



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Brabender® Smart Workflow Features

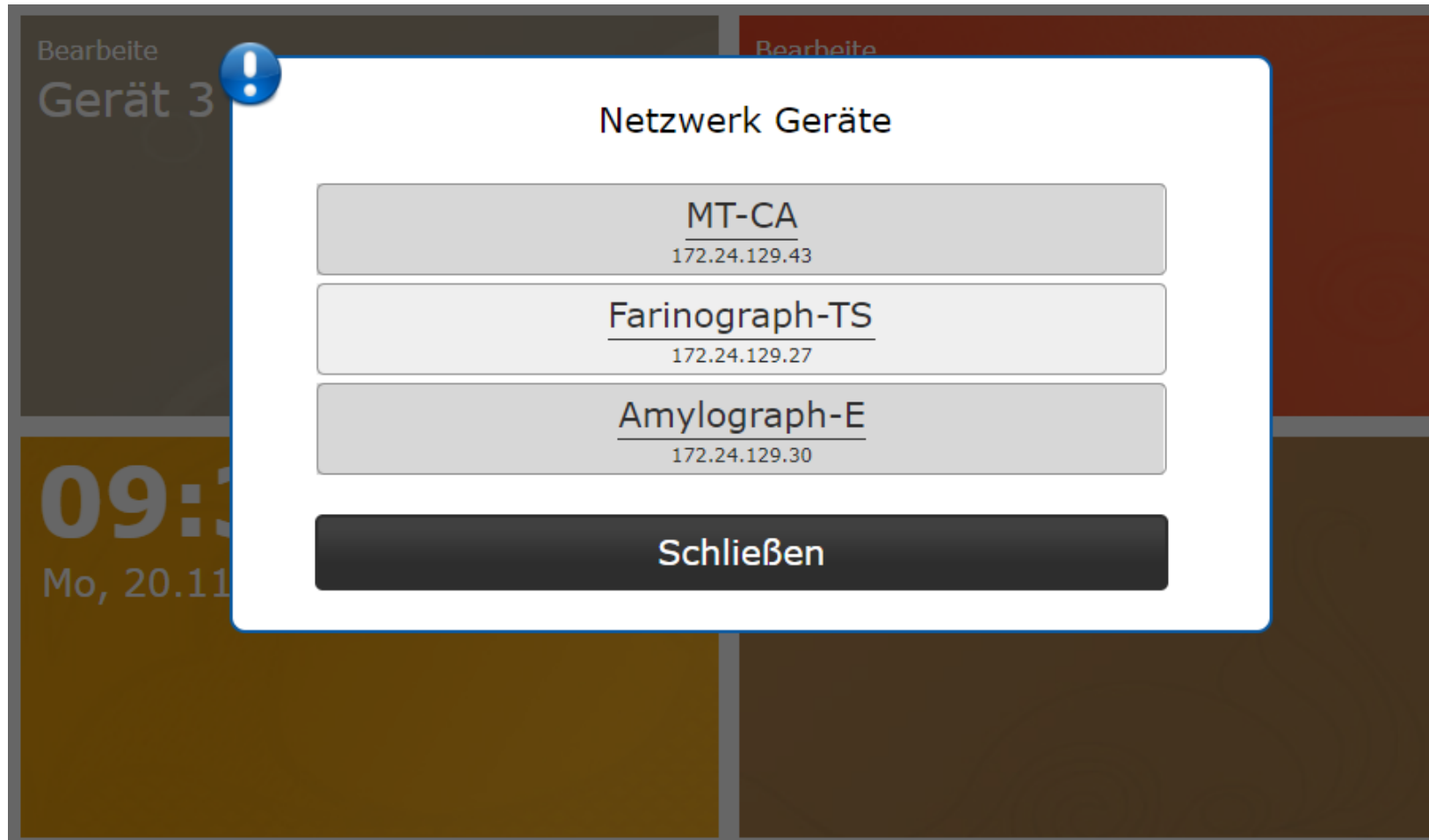
MultiDevice: Fast access to multiple instruments



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Brabender® Smart Workflow Features

Automatic identification of instruments within the network (by remote control)



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Brabender® Smart Workflow Features

Automatic data transfer:

Measured values can automatically be transferred to other instruments for further data processing.

Example:



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For example Automatic Titration

Automatic data transfer:

- Farinograph receives from MT-CA the moisture content of the flour
- Farinograph receives from GlutoPeak the estimated water absorption of the flour
- Both values can be used for the automatic titration method



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Brabender® Smart Workflow

Farinograph - Automatic Titration

- Overview -

Aqua-Inject



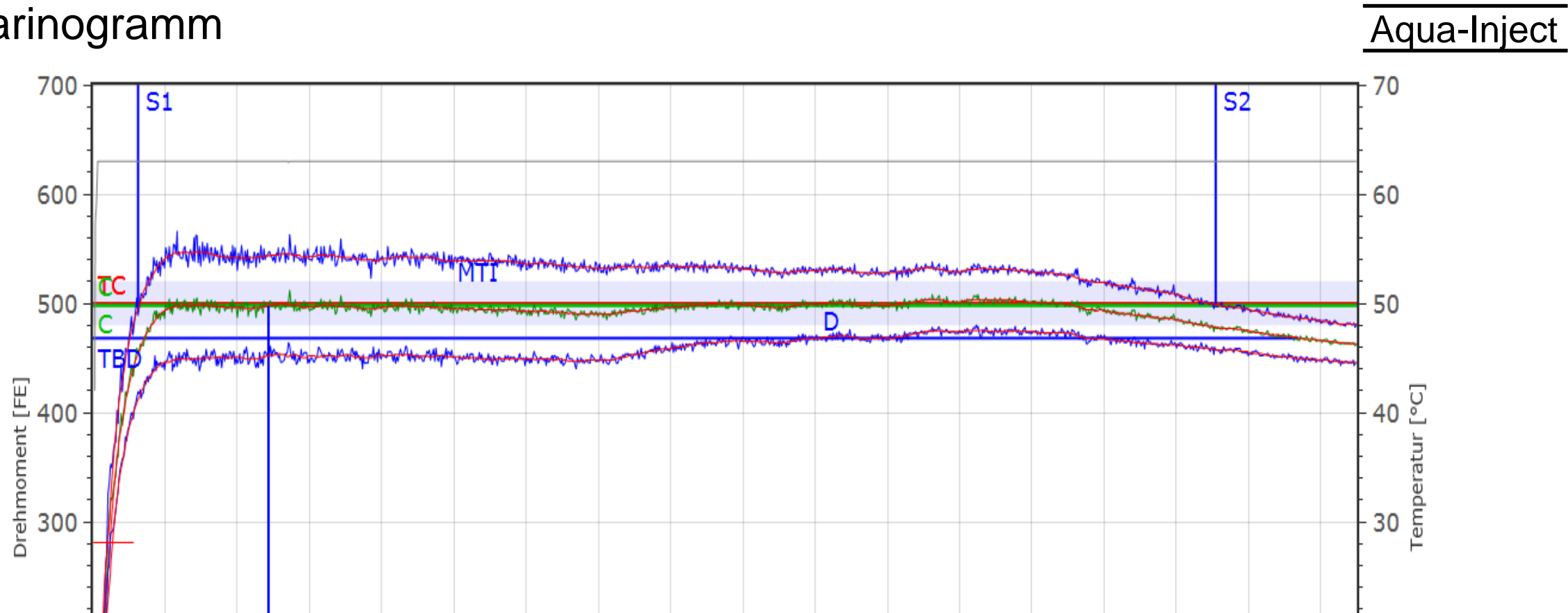
- High accuracy (0,25 ml)
- Vibration resistant
- Dosing capacity of more than 2 l
- Continuous flow and drop mode
- Filling level control
- Tempering without thermostat
- Support for Farino E/TS 300 gr mixer
- Automatic Titration
 - Farinogramm
 - Extensogramm

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Prerequisite for a Farinogram is the correct water dosing within the first 22 sec in the measurement

- Farinogramm



Prerequisite for Farinogram:

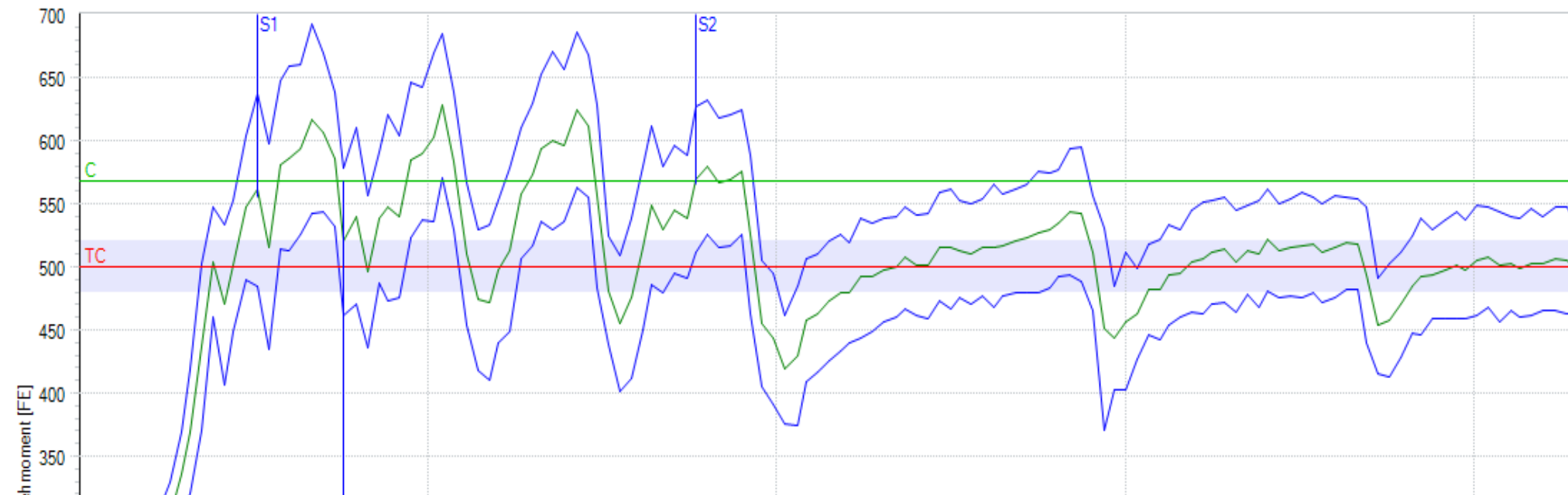
- Water dosage within 22 sec
- Curve at 500 BU \pm 20 BU

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The manual determination of the correct water dosage requires an operator and eventually multiple trials

- Manual titration curve -

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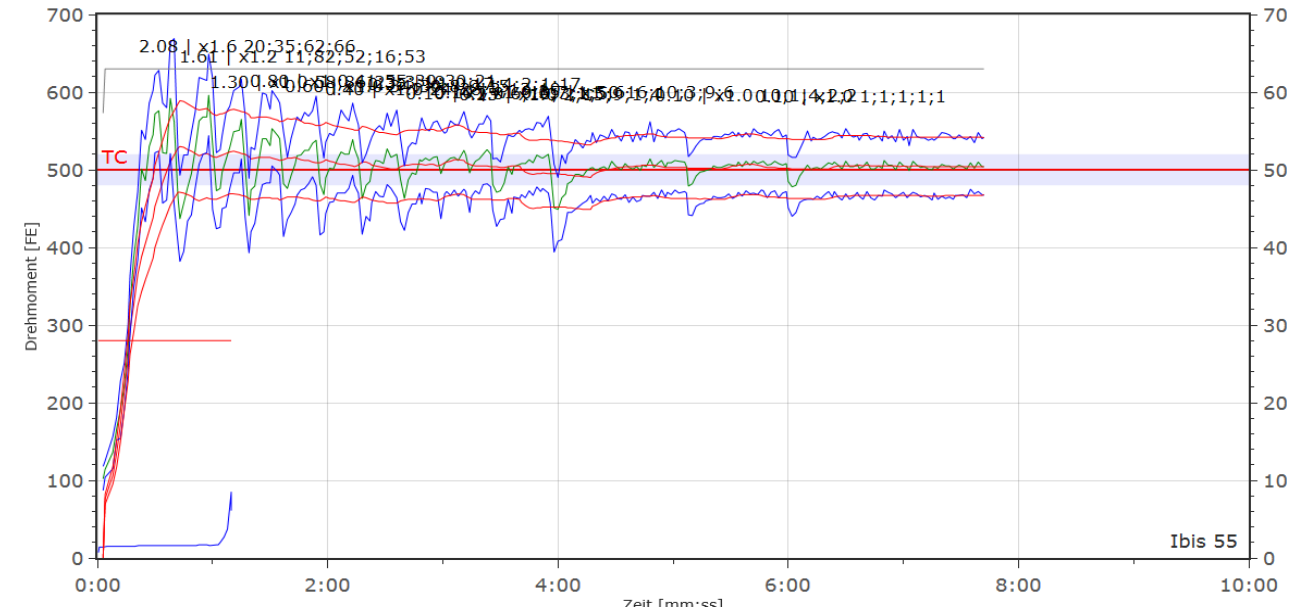
The new automatic titration feature allows for an automatic determination of the water dosage

- Automatic Titration -

Define a start dosage
(e.g. 55 %)

Start
Automatic Titration

Aqua-Inject



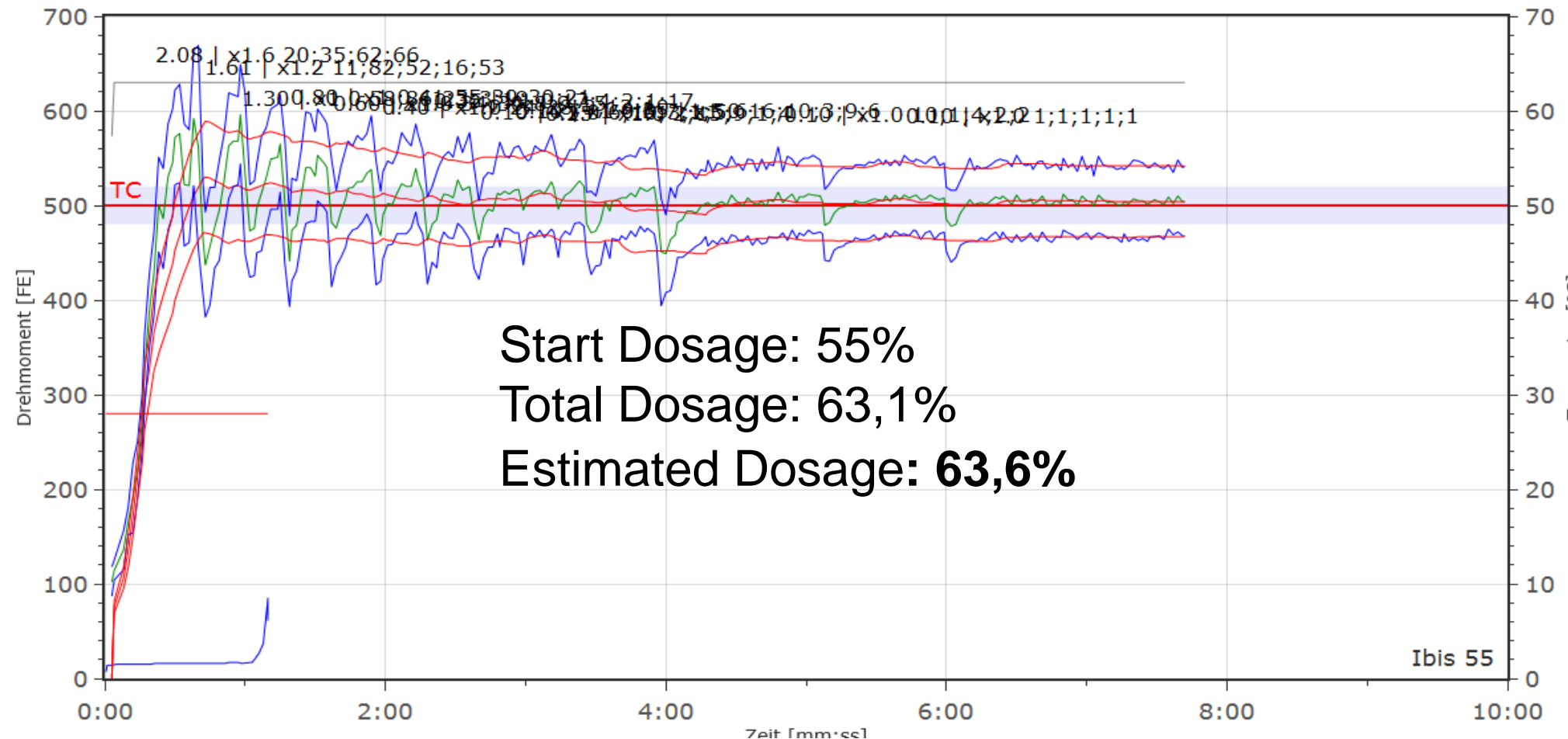
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The time for the automatic determination of water dosage depends...

- Automatic Titration – Example Farinograph – High dough stability

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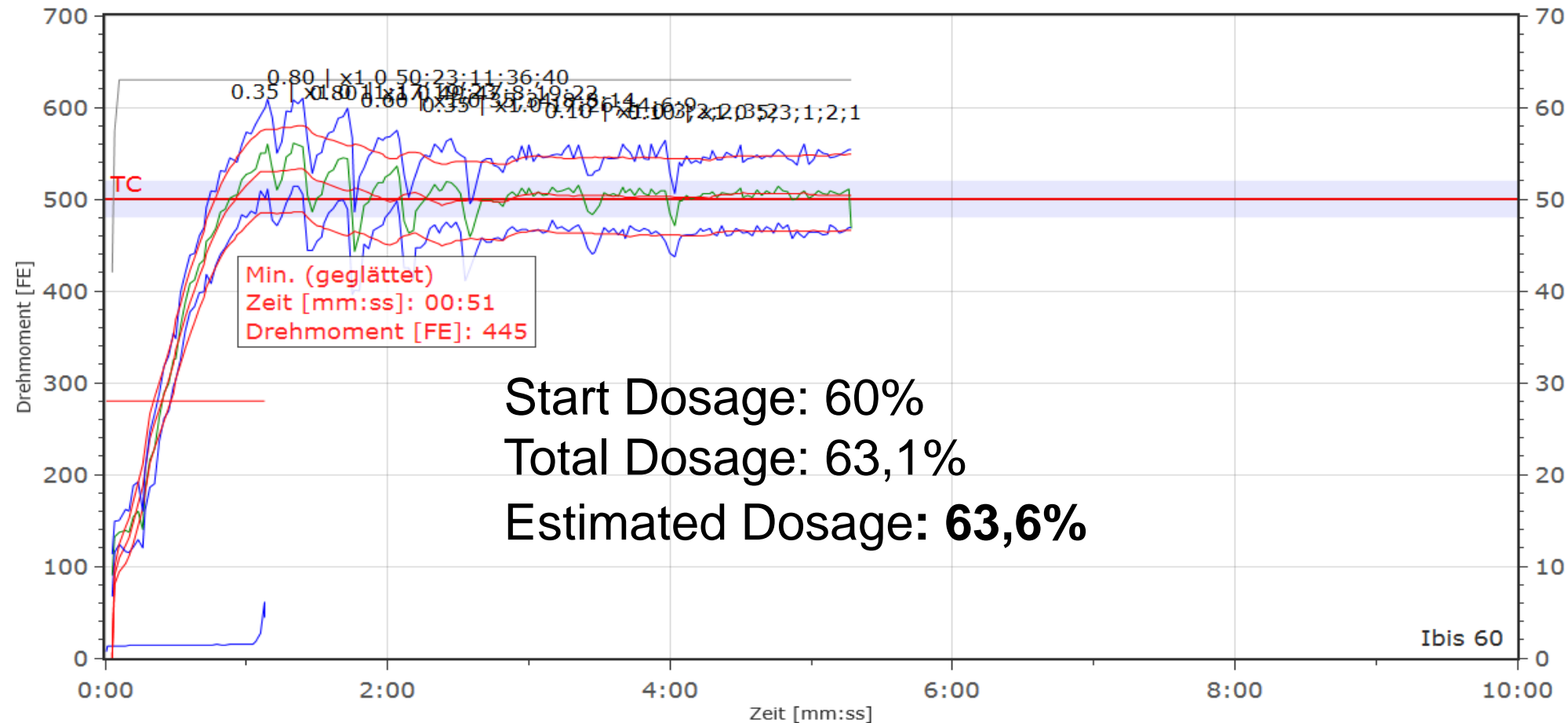
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... on the delta between the start dosage and the real water absorption

- Automatic Titration – Example Farinograph – High dough stability

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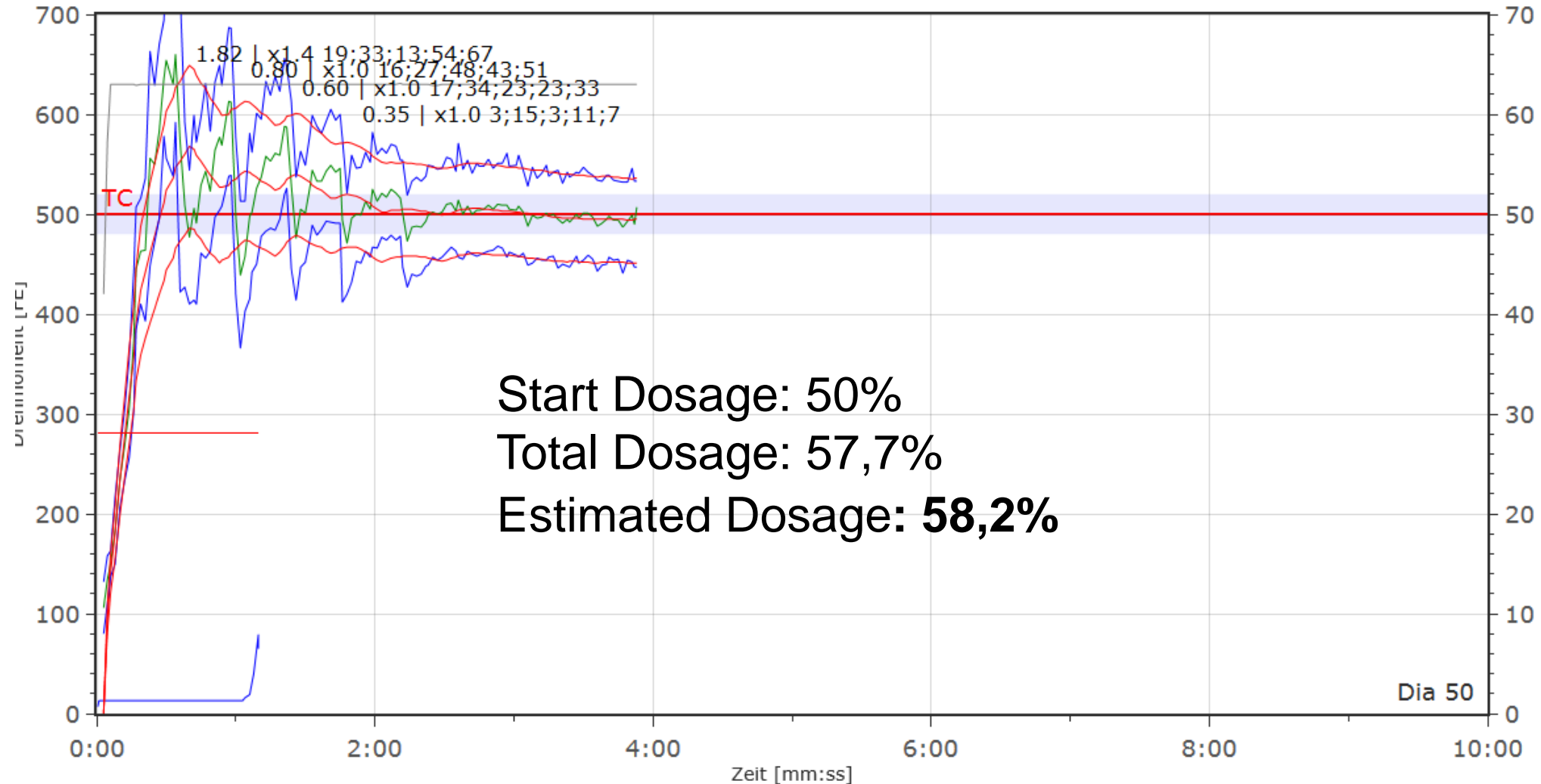
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The automatic titration works also for doughs with low stability

- Automatic Titration – Example Farinograph – Low dough stability

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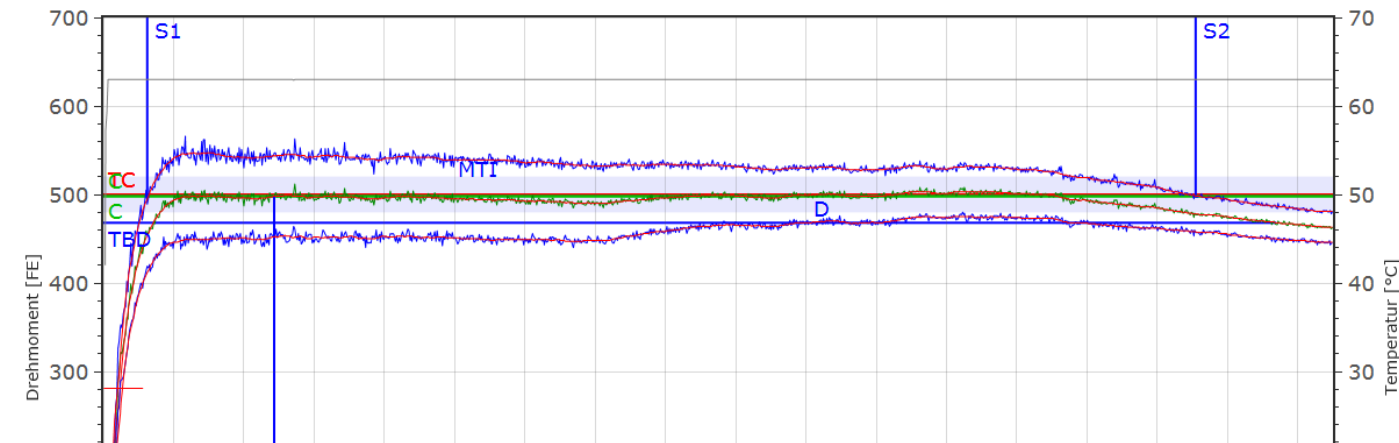
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The resulting Farinogram for doughs with low and high stability matches perfectly the criteria of 500 BU

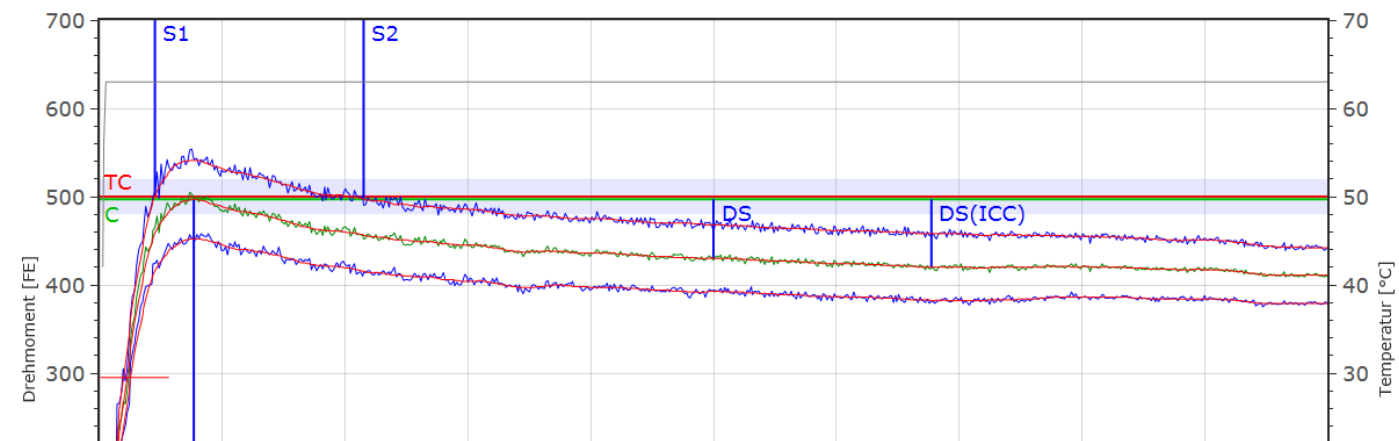
- Automatic Titration – Example Farinograph – Farinogram

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High Stability



Low Stability

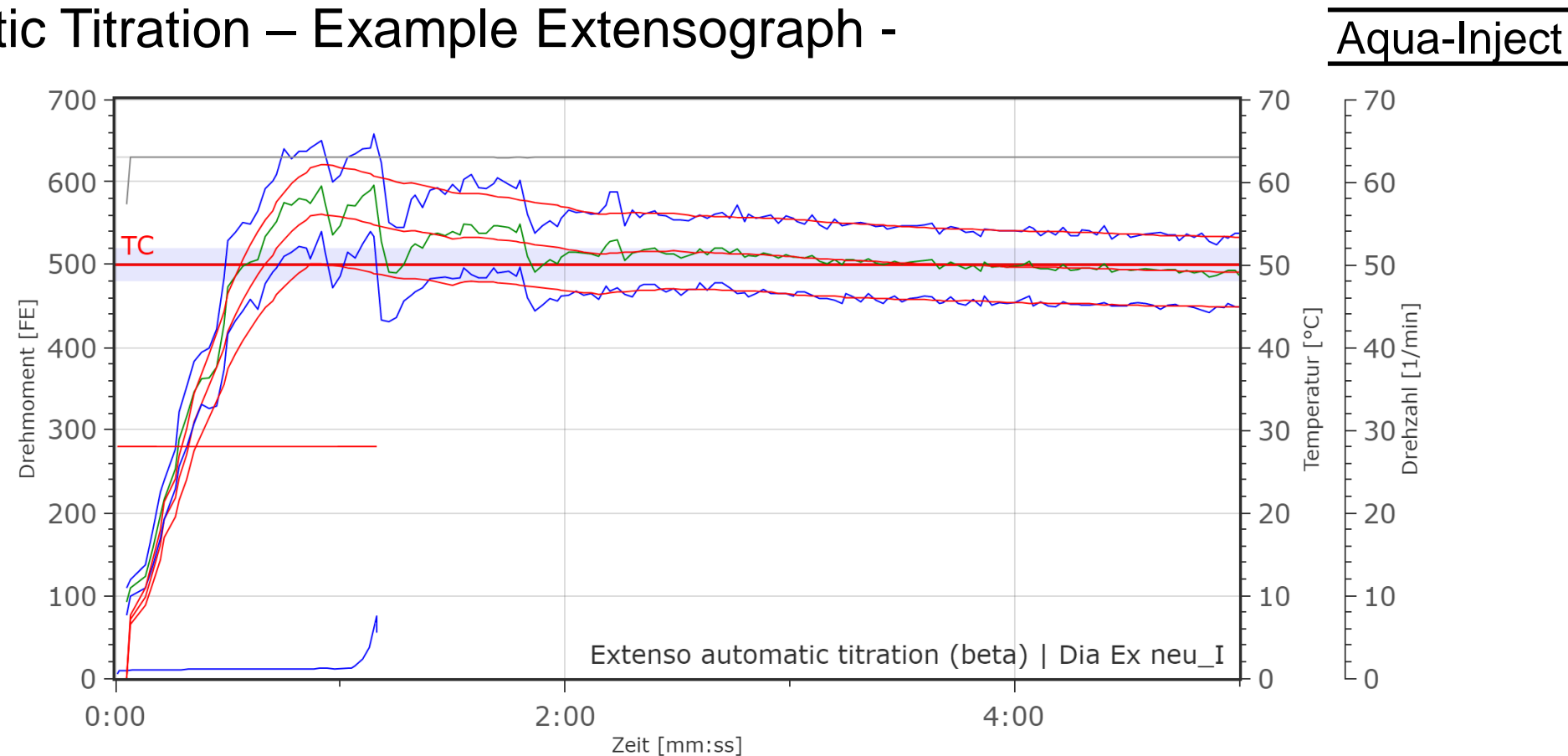


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Additionally, the Automatic Titration supports the preparation of the Extensogram dough for the ICCmethod

- Automatic Titration – Example Extensograph -



- Extensogram Titration Target: 500 BU \pm 20 after 5 min
- Standard requires single dosing but no negative effects expected according to Brabender trials → Customer decides which method to use

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The Aqua-Inject is a precise water dosing system with an increased automation level

- Take-Away Messages

Aqua-Inject

- Precise water dosing system with high capacity
- Automatic Titration estimates the required water dosage for the Farinogram and the Extensogram automatically
 - Increased automation level – operator interactions reduced
 - Increased reproducibility
 - Increased efficiency

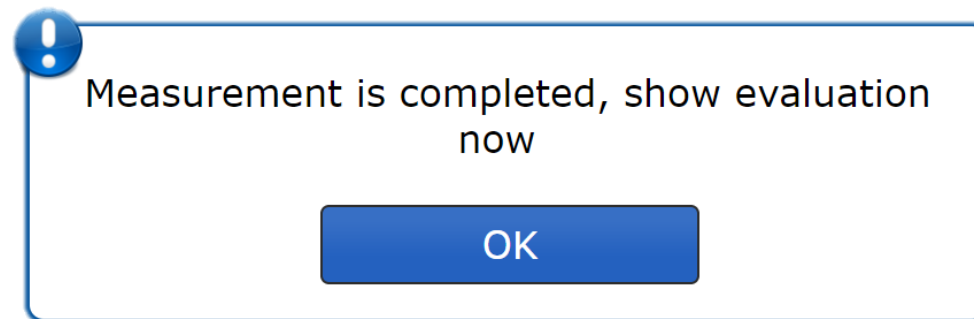
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Brabender® Smart Workflow Features

MultiDevice Alarm:

Acoustic alarm and automatic redirection to correspondent instrument alarm



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Brabender® Smart Workflow Features

Create correlations from different sources

Add tests to correlation

Show tests per page All Q Search...

<input type="checkbox"/>	ID	Sample	Order	Method	User	Time
<input type="checkbox"/>	B7axqboznzbj	local		-/-	Ease	11/19/17 12:12 PM
<input type="checkbox"/>	B7axqbo28jm1	Diamant	Demo	Brabender ICC BIPEA 300	Brabender	2/6/15 10:55 AM
<input type="checkbox"/>	B7axqbo28jm8	Ibis	Demo	Brabender ICC BIPEA 300	Brabender	2/6/15 10:07 AM

Start correlation

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Brabender® Smart Workflow Features

LIMS Connectivity: Schedule measurements

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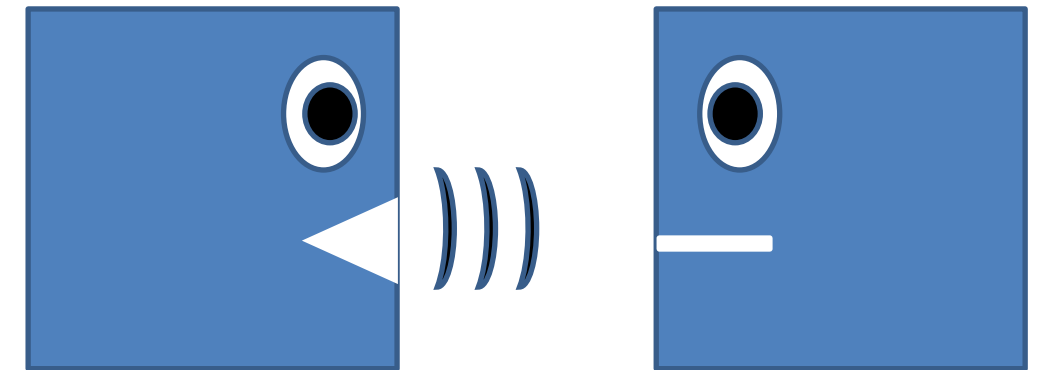
Mo.	Di.	Mi.	Do.	Fr.	Sa.	So.
25	26	27	28	29	30	1
	2 Versuche	1 Versuche		1 Versuche		
2	3	4	5	6	7	8
9	10	11	12	13	14	15
					2 Versuche	
16	17	18	19	20	21	22
2 Versuche				1 Versuche		
23	24	25	26	27	28	29
			1 Versuche			
30	31	1	2	3	4	5

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Brabender® Smart Workflow Features

Other features:

- ✓ Easy connection via Plug & Play
- ✓ Centralized test lists
- ✓ Centralized instrument status overview
- ✓ Export of measurement readings
- ✓ ERP integration
- ✓ Only one screen necessary



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Brabender® Smart Workflow

Your benefits

Benefit from the MetaBridge Software and Smart Workflow:

Optimize your processes.



Increase efficiency.



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Best quality with Brabender
Discover our solutions!

Any questions?

Feel free to contact our team!

**By the way, we cordially invite you to have a look at
the other Brabender solutions presented at our booth No. 10**



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