

## Universal Torque

## **Viscometer**

**Brabender: ViscoQuick** 





# The Brabender ViscoQuick Rotational Viscometer:

# Compact and 25 % Faster

The Brabender ViscoQuick viscometer is compact, reliable, and delivers results 25 % faster than comparable devices. It's specialized in measurement for larger sample quantities (5 g to 15 g / 100 mL to 110 mL) that require higher torques (0.25 Nm).

The integrated PC, touchscreen, and temperature control system (Peltier) optimize lab space and reduce costs for periphery. Heating and cooling rates of +20 °C / -15 °C per minute ensure short measuring times (e.g., starch gelatinization below 10 minutes). And the MetaBridge software allows access and data export from any device.

ViscoQuick enables real-time dosing of substances and rapid rheological determination at temperatures below 20 °C. And its comprehensive database supports a wide range of applications while delivering a user-friendly, automated experience.

All of this makes the ViscoQuick an intuitive solution for quick quality checks and formulation development of, for example, starch and flour. It's ready-to-use right out of the box and doesn't require a comprehensive installation process.

### Our flour and starch measurement instruments lead the way

- → Know you're using an instrument from the established market leader in the flour and starch measurement field
- → Communicate in the established flour and starch measurement language, Brabender Units (BU), or a universal unit such as cP and mPas

#### **Exchange waiting times for productivity**

- → Save time with ViscoQuick's rapid heating and cooling rates ( +20 °C/min | -15 °C/min )
- → Obtain measuring results 25 % faster than any other solution on the market

#### MetaBridge: Streamlined data access

- → Access your measurements from any device and location via web browser
- → Export and send data to colleagues and third-party systems such as LIMS and ERP, or even send results by email

#### Reliable results below 20 °C

- → Unlike conventional devices that can only cool to 50 °C, ViscoQuick can reach temperatures lower than 20 °C in a very short time
- → Cool down to the temperature at which food will be consumed or processed

#### Real-time dosing for added substance insight

- → Dose during the process and get immediate insights into the effects of added substances
- → Monitor and adjust your process in real time

#### No periphery: Save cost and lab space

- → Compact design with integrated tempering system, PC, and touchscreen
- → Precise Peltier temperature control system with direct heating and cooling minimizing temperature gradients



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# Your Go-To Universal Viscometer for High Torques

For every application



## Beginning of gelatinization

Swelling of the starch granules caused by accumulating water leads to increasing viscosity



#### Maximum hot viscosity

The water accumulation reaches its maximum, and the starch granules begin to burst at the first point of maximum viscosity



#### Minimum cold viscosity

The starch is gelatinized as a gel or paste and the amylose and amylopectin molecules are completely separated at minimum viscosity



#### Maximum cold viscosity

A 3D crystal structure is formed by the amylose and amylopectin molecules, which leads to a second viscosity maximum in the cold phase. The calculated breakdown (B-2) and the setback (3-2) values represent further starch quality parameters



(1)

#### Chocolate

Measure the viscosity at different temperatures to determine processability, texture, and mouthfeel of the chocolate



#### **Proteins**

Determine the viscosity to improve protein properties such as enzyme stability and activity



#### Ketchup

Measure the heating and cooling behavior or thixotropic characteristics in product development and quality control of ketchup formulations

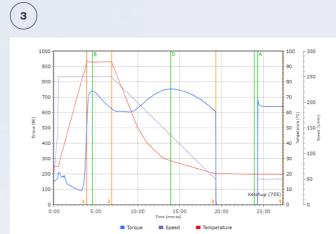


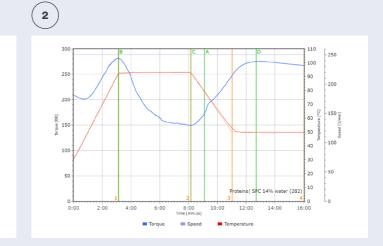
#### Malt

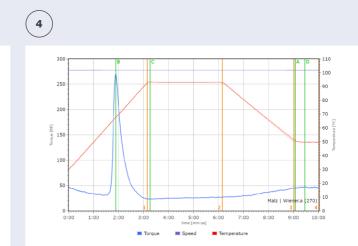
Measure the enzyme activity and gelatinization properties of the malt



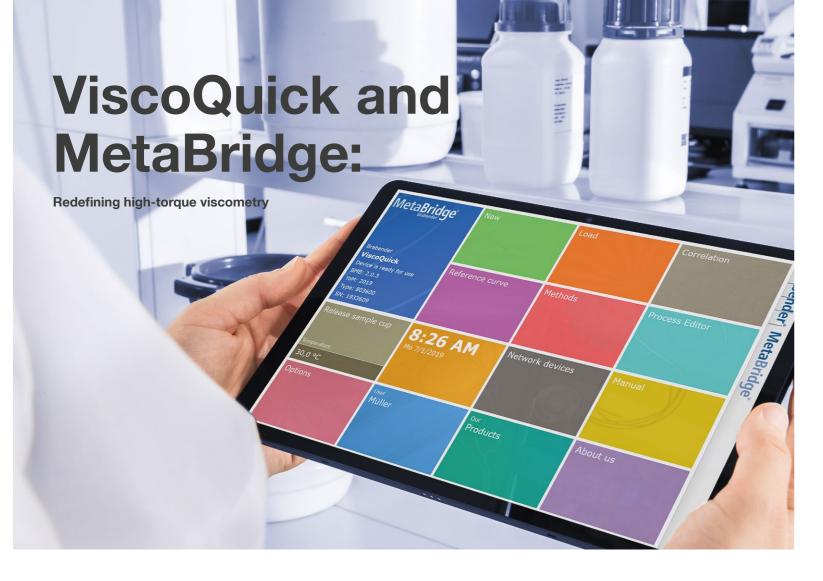














#### **Optimized workflows**

- → Guided workflows to avoid common errors and to ensure a smooth process in the laboratory
- → Predefined methods that combine established process parameters that you can easily select with one click
- → You're completely flexible and can adapt the predefined methods and evaluation to your individual requirements at any time



#### **MetaBridge Connect**

- → Easy access to your measurement data via a web browser within the company network
- → MetaBridge devices exchange information to optimize your work in the laboratory; this enables, e.g., the automatic exchange of sample names and other parameters
- Our customer service team is happy to help at any time via our built-in feedback and remote maintenance function



#### Data sharing

- → Standard data exports in typical formats such as Excel, CSV, and PDF
  - → Built-in mailing function for a quick exchange with colleagues and customers
  - → Support of third-party systems (e.g., LIMS, ERP) via Brabender WebAPI, shared network folders, or OPC



#### Reference comparison and correlation

- → The reference curve feature lets you monitor material quality in real time and receive automatic feedback on whether or not specifications have been
- → Compare a multitude of measurements with the correlations addon feature to obtain an optimal understanding of your materials

#### **Brabender: ViscoQuick**

Viscosity range	30 cP/mPas to 50,000 cP/mPas
Speed	0 min <sup>-1</sup> to 500 min <sup>-1</sup>
Temperature range	15 °C to 110 °C
Heating rate	Up to 20.0 °C/min
Cooling rate	Up to 15.0 °C/min
Sample volume	5 g to 15 g
Distilled water	100 mL to 115 mL
Touchscreen	10.4" (1024 × 768 px), fixed
Dimensions	430 mm x 640 mm x 350 mm (W x H x D)
Weight	Approx. 36 kg
Accessories	<ul> <li>Stainlesss steel universal beaker: For samples up to 115 mL (universal paddle) or 50 mL (tube paddle C 45)</li> <li>M-shaped universal paddle: Universal stainless steel paddle for viscosity range of 30 mPas to 50,000 mPas</li> <li>Static mixer insert: Stainless steel mixer insert for optimal flow conditions</li> </ul>

- Flow body: Minimizes the turbulence effects to ensure laminar shear conditions - Beaker 60 mL: Stainless steel beaker for samples up to 60 mL, without flow body - Tube paddle C 34: Single gap system for measuring liquids with higher viscosities

- Tube paddle C 45: Double gap system for liquids with medium viscosity (30 cP/mPas to 20,000 cP/mPas)

# Reliable. Compliant. Qualified.

FIND OUT MORE

www.anton-paar.com/ service

Our well-trained and certified technicians are ready to keep your instrument running smoothly.



Maximum uptime



(200 cP/mPas to 50,000 cP/mPas)

Warranty program



Short response times



A global service network

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