Anton Paar

Standard Flour **Viscometer**

Brabender: Amylograph-E

Brabender®
A brand of **Anton Paar**

Amylograph-E

Your choice for flour

The Amylograph-E is your first choice for accurate analysis of various types of flour, setting the basis for your entire value chain. With more than 95 years of experience working in flour measurement technology, you know you work with a true partner when you work with us.

FIND OUT MORE

www.anton-paar.com/apb-amylograph

Global compliance
The Amylograph-E fulfils all major national and international standards for the measurement of starch gelatinization and enzyme activity, including ICC, AACCI, and ISO. Your flour quality is described in a globally established language: Brabender/Amylograph Units (BU/AU).

Accurate, practical results
Thanks to its starting temperature of 30 °C and a heating rate of 1.5 °C/min, the Amylograph-E captures the entire enzyme activity before they're deactivated by excessively high temperatures. The heating rate is a copy of the gelatinization in a loaf of bread.

Ready for the long-haul
The stainless steel measuring system doesn't wear out and can be used for many years without additional follow-up costs.

Real-time temperature monitoring
The instrument measures the temperature directly in the sample, which eliminates fluctuations and gives you accurate results in line with production conditions.

The Amylogram

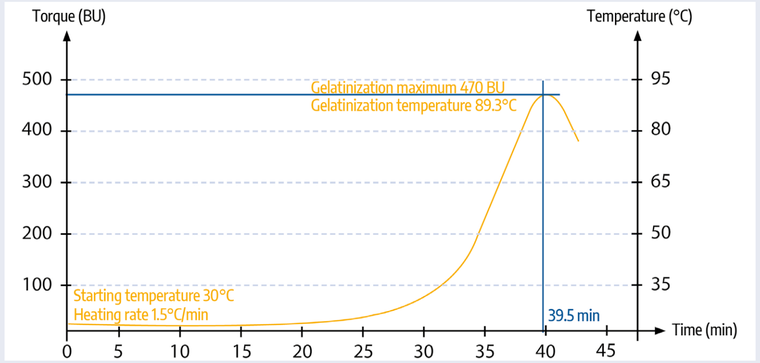
Reliable data, guaranteed

In line with international standards, a defined suspension of flour, whole meal flour, or meal and distilled water is prepared and transferred to a measuring system. This is then heated at 1.5 °C/min, which makes the starch in the sample gelatinize at a characteristic temperature. The changing viscosity is recorded as a diagram and provides the various evaluation points. The curve depends on the amount of starch-splitting alpha-amylase, the so-called enzyme activity of the flour. The higher the enzyme activity, the lower the maximum curve.

1
Beginning of gelatinization
Swelling of the starch granules in the flour caused by accumulating water leads to increasing viscosity. The temperature [°C] and the viscosity [AU] are registered at the point in the curve when it starts to rise up.

2
Gelatinization maximum
The water accumulation reaches its maximum, and the starch granules begin to burst. As a result, the viscosity decreases. The highest point of the curve is the maximum viscosity, which is recorded in Amylograph Units (AU).

3
Gelatinization temperature
The temperature at the highest point of the curve is evaluated as gelatinization temperature [°C].



Optimize Your Workflow **with MetaBridge**

Easy-to-use software for everyday laboratory work with the Amylograph-E.

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, letting you automatically exchange sample names and other parameters

Data sharing
- → Standard data exports in typical formats such as Excel, CSV, 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 UA

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 met
- → The correlations add-on feature lets you compare measurements to obtain an optimal understanding of your materials

Optimized workflows
- → Many well-known ISO, ICC, and AACCI standards are directly integrated into the software
- → Our guided workflows avoid common errors to ensure a smooth process in the laboratory
- → You're flexible and can customize the predefined methods and evaluations. This doubles the heating rates and saves 50 % on your measuring time

EvaluationEditor
- → This add-on feature enables you to create your own evaluations and perform them automatically after your measurement
- → Additional evaluation points can give you a deeper analytical understanding of your measurements

Brabender Amylograph-E

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Measuring principle	Torque viscometer
Sample volume (approx.)	550 mL
Temperature range	30 °C to 98 °C
Heating rate	- Standard 1.5 °C/min - Adjustable 0.1 °C/min to 3.0 °C/min
Speed	- Standard: 75 min^{-1} - Adjustable: 0 min^{-1} to 300 min^{-1}
Dimensions (W x H x D)	490 mm x 890 mm x 400 mm
Weight (approx.)	30 kg
Power supply	- 1 x 230 V; 50/60 Hz + N + PE; 2.8 A - 1 x 115 V; 50/60 Hz + PE; 5.6 A
Interfaces	USB 2.0
Computer requirements	Windows 10 (64-Bit), HTML5 web browser, Intel® Pentium™ N4200, 4 GB DDR, 20 GB SSD, USB 2.0 Port
Accessories	- Precision balance - 0.1 g to 1000 g
Standards	ICC-Standard No. 126/1 ISO 7973 AACCI Method No. 22-10.01 AACCI Method No. 22-12.01 GOST ISO 7973 CEN EN ISO 7973 DIN EN ISO 7973 SN EN ISO 7973 UNE-EN ISO 7973 OENORM EN ISO 7973 NF EN ISO 7973 NF V03-710 BS EN ISO 7973 ILNAS-EN ISO 7973 GB/T 14490 TCVN 9709

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

Warranty program

Short response times

A global service network

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