



Best Quality

Food and Animal Feed Quality Testing Solutions

Outstanding quality – right from the outset



Brabender has focused on food and animal feed quality testing right from the word go. We now supply our high quality laboratory instruments and equipment to clients in R&D facilities all over the world.

We always maintain close customer relationships through a global network of branches and agencies. Be it for cereal, starch, bakery product and pasta, animal and fish feed, snacks and confectionery or other applications – we are able to create the optimum quality assurance and product development solutions in our state-of-the-art application laboratory.



Watch video



Bakery and
Pasta Products



Cereals



Starch



Animal Feed



Confectionery



Miscellaneous



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... where quality is measured.

"The biggest challenge that milling businesses are set to face is a changing customer market."

*Peter Hirschmann,
Bocksmühle, Berg**

"Millers have managed to deliver consistent quality, irrespective of current harvesting weather and current market requirements. That is a magnificent achievement!"
*Michael Wippler, Zentralverband des Deutschen Bäckerhandwerks, Berlin**



Bakery and
Pasta Products



Cereals



Animal Feed



Confectionery



Miscellaneous

Thoroughly prepared

Brabender's sample preparation solutions

Who knows what a raw material is capable of achieving, who is able to make optimum use of it and process it to superior standards of quality. That is an important prerequisite for satisfied clients and business success.

By providing you with first-class laboratory instruments, Brabender is there to assist and support you with raw material analyses and quality controls throughout your production cycles right from the word go. Using a quick gluten measuring method, you can determine the quality of cereals delivered to your plant as soon as they arrive. We provide a broad range of mills for sample preparation purposes. This means that you are thoroughly prepared – and so are your sample materials.



... where quality is measured.



GlutoPeak®

Fast and efficient method of determining the quality of gluten

The Brabender GlutoPeak has a quick, automated procedure that measures the quality characteristics of gluten in cereal flour products in a reliable and reproducible way, even using small sample quantities. These parameters provide an indication of flour quality and suitability for specific purposes. These analyses enable mills, starch producers and cereal merchants to set up efficient processes in their incoming goods and production facilities. Bakers benefit from rapid incoming goods checks as well as specification checks. Breeders only require small sample quantities to screen the quality of their cereals.



Your Benefits

Time savings

- Fast procedure (1 to 10 minutes)
- Rapid identification of unsuitable materials, thus avoiding further time-consuming measurements

Cost effectiveness

- Saves on materials thanks to small sample quantities (3 to 10 grams)

- Avoidance of waste:
 - Detection of drying and heat damage in flour and dry gluten
 - Exclusion of unsuitable material prior to the production process

User friendliness

- Automated measurement for ease of handling

Applications

- Cereals
- Flour and wholegrain flour
- Gluten
- Vital gluten

What does the GlutoPeak measure?

Aggregation behavior of

- gluten in flour
- pure gluten

The readings enable you to draw conclusions about gluten quality and suitability for use in conjunction with specific bakery products.



Rapid Flour Check:

Refine your GlutoPeak measurement results by using the innovative Rapid Flour Check, in order to obtain further readings for protein content, wet gluten, moisture absorption and water absorption coefficient correlations in less than five minutes.



Watch video

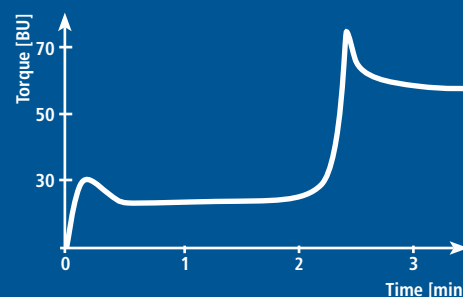


Find out more

Download now:

Application Handbook

Learn more about the different applications and get more, exclusive downloads at the Brabender Partner Network.





Quadrumat® Junior

Preparation of manufacturing-grade cereal samples

An automated, multi-stage milling process enables this high-performance laboratory mill to produce flour samples that come especially close to meeting real-world conditions and that are virtually the same as commercially produced flours in terms of ash content, yield and baking quality. When used in an extra procedure together with the Brabender Bran Duster, ash content can be enhanced and yield can be increased by up to 10 percent.



Applications

- Wheat
- Spelt
- Rye
- Barley
- Rice
- ... and others

What is it for?

- Production of manufacturing-grade test flours, e.g. for baking tests
- Determination of milling properties of various samples (wheat, rye, etc.)
- Tests to determine potential yields

Partners best with:

- Bran Duster (see page 10)
- 3-Phase-System consisting of the Farino-, Extenso-, Amylograph (see page 17)

Your Benefits

Time savings

- High-performance milling of up to 500 grams in five minutes
- Simple operation
- Faster removal of flour and bran

High degree of precision

- Aspiration attachment prevents clogging of the rollers
- Preparation of cereal samples with up to max. 18 percent moisture

User friendliness

- Easy-to-clean design:
 - Easy-to-remove round sifter
 - Large drawers for flour and bran
- Meets current safety standards

Flexibility

- Three versions available: Standard, Durum Wheat and Special Flours
- Sifters available with different mesh sizes
- Special sifter for Alveograph tests

Quadrumat Junior – various versions:

Quadrumat Junior Standard

- Production of wheat, spelt, rye, barley and rice samples for further analysis, e.g. using a Farinograph

Quadrumat Junior Semolina Mill

- Wider spacing between rollers for grinding cereals, in particular durum wheat, into semolina
- Quadrumat Junior for special flours

ICC Standard No. 115/1

- AACC Method No. 26-50.01



Watch video



Find out more

... where quality is measured.



Quadrumat® Senior

High-performance mill for high yields

Featuring profile-ground, toughened rollers, this all-purpose laboratory mill delivers a gentle milling procedure, great reproducibility and consistent production conditions. It features two high-performance milling systems each consisting of four rollers that can mill 8 to 10 kilograms of cereals per hour. After milling, you obtain four possible products: meal, flour, semolina bran and bran. By using the Bran Duster, ash content can be enhanced and yield can be increased.



Your Benefits

High performance

- 8 to 10 kg/h
- Two x three different milling zones

High-quality samples

- 4-roller system featuring a total of eight rollers (two milling systems each with four rollers)
- Six milling steps
- Excellent reproducibility and consistency

Time savings

- No intermediate steps required
- Fully automatic milling process
- Self-emptying sifter
- Easy to operate

Applications

- Wheat
- Spelt
- Rye
- Rice
- Durum wheat
- Chia

What is it for?

- Production of manufacturing-grade test flours, e.g. for baking tests
- Determination of milling properties of various samples (wheat, rye, etc.)
- Tests to determine potential yields

Partners best with:

- Bran Duster (see page 10)
- 3-Phase-System consisting of the Farino-, Extensio-, Amylograph (see page 17)



Find out more

Special Durum Version

A special version of the Quadrumat Senior is available for the preparation of durum wheat samples.

Structure

The Quadrumat Senior utilizes two four-roller units:

- A wholegrain unit
- A cereal milling / semolina release unit

Fractions are separated according to granulation in a two-part sifter featuring two sifter floors arranged one above the other – either as a combined flour or as two separate flours.

Standards

BIPEA – BY.102.D.9302



Sedimat

Special mill for the Zeleny sedimentation test

This laboratory mill prepares samples for the Zeleny sedimentation test (ICC Standard Numbers 116 and 118, ISO 5529). This test records the gluten quality of flour and quantity and therefore enables reliable forecasts about its baking properties to be made. The Sedimat mill in conjunction with the shaking device is the hardware platform for this test and delivers excellent reproducibility.



Applications

- Cereals



Accessories

- Shaking device
- Shaking cylinder
- Automatic reagent feeding
- Reagents: Bromophenol blue solution, lactic acid and isopropyl alcohol



Zeleny sedimentation test

Your Benefits

Simple operation

- Fixed grinding gap settings for reproducible results
- Fully automatic milling and sifting

Simple cleaning

- By opening the front panel

Quick and reliable

- Rapid throughput, some 100 grams in 3 minutes



Find out more

Bran Duster



Increase your flour yield

The Brabender Bran Duster enables you to separate any flour particles still stuck to the bran in a reliable, gentle way. You thus increase the yields obtained using the Quadrumat mills by up to 10 percent. You can precision-set the ash content of the grist and obtain exact specifications.

Applications

- Flour
- Bran



Partners best with:

- Quadrumat Junior
- Quadrumat Senior



Your Benefits

You achieve your desired specification through

- An increase in yield
- An increase in ash content
- Precision-setting of ash content

Excellent separation performance

- Mesh size: 200 µm (alternatives available on request)

Easy to handle

- Low-maintenance design



Find out more

Break Mill SM 4



The compact, robust break mill

This compact, robust laboratory mill is used to prepare samples for moisture testing and other analyses, e.g. of protein or fat content or gluten quality (GlutoPeak). Its special grinder design prevents the grist from warming up and losing moisture during the milling process

Applications

- Cereals
- Pseudo-cereals
- Pasta
- Legumes
- Spices
- Coffee beans
- Animal feed
- ... and others



Partners best with:

- Moisture Tester MT-CA



Your Benefits

Reliable milling results

- Continuous adjustment of milling gap for the desired degree of fineness
- Reproducible milling

Ideal sample preparation

- Minimal heat build-up, no loss of moisture during milling
- Particularly suitable for analyzing protein or fat content



Find out more

Download now:

Application Handbook
Learn more about the different applications and get more, exclusive downloads at the Brabender Partner Network.



Safety

The special CE-conform grinder design meets all current safety guidelines.



Rotary Mill

The all-purpose mill

That is versatility: the Brabender Rotary Mill reliably shreds materials of different consistencies to an adjustable degree of fineness. Its safe, compact design and its robust mode of operation make it a very useful tool for shredding different types of sample material for analysis and further testing purposes at various degrees of fineness.



Applications

- Cereals
- Legumes
- Tobacco
- Confectionery and snacks
- Animal and fish feed
- Coffee
- Various fibrous, tough and firm materials (e.g. hay, leather, coconut shells, roots)
- ... and others

Your Benefits

All in one

- All-purpose tool

Simple handling

- Samples are thoroughly shredded
- Sieves are easy to replace

- Interchangeable sieves deliver different degrees of fineness
- Low-dust and low-residue milling



Find out more

Safety

In an emergency, the Rotary Mill features an emergency stop switch. Safety switches in the grinding chamber and at the collector prevent the mill from operating when the door of the grinding chamber is open. An extra motor retarder stops the motor without it running on when the door is opened or the collector is removed.

... where quality is measured.

"There's no such thing as good or bad material, only the right or wrong application. I often find that the material delivered does not match the specification."

"Brabender equipment helps me to ensure that I use the right raw material for my application. That means I can keep loss of production and waste to a minimum and always provide my customers with high product quality."





Bakery and
Pasta Products



Cereals



Starch



Animal Feed



Confectionery



Miscellaneous

Quality requires control

Brabender provides you with first-class laboratory instruments for detailed raw material analyses and quality controls right along your production chain. We have more than 90 years of experience of the cereals business. We harness our experience and skills to develop suitable laboratory equipment to test the quality of your products. Check out the merits of our solutions that meet the needs of your particular application.

Why not get in touch with our team!





Farinograph®-TS

The standard for fast, automated flour analyses

Reliably and reproducibly analyzing water absorption and kneading properties – that's what the Farinograph-TS rheometer guarantees. It is simple to operate thanks to the innovative, web-based Brabender MetaBridge software program – providing non-device-dependent access and a wide range of test customization options.



MetaBridge
Brabender

Your Benefits

Optimum quality

- Continuously tested flour products
- Reproducible results

Time efficiency

- Ease of operation
- Automated processes
- Plug & Play: immediately ready to use

Cost effectiveness

- Minimization of waste
- Measurement range up to 20 Nm
- Continuous speed control from 0...200 min⁻¹
- Test customization using Brabender MetaBridge software

Applications

- Flour (with / without gluten)
- Wholegrain flour
- Dough

What does the Farinograph-TS measure?

- Water absorption properties (for gluten-free products using the FarinoAdd-S300)
- Kneading properties of dough



Aqua-Inject automatic water dosing system:

Precise, reliable and rapid addition of liquids combined with the production of automatic titration curves. The Aqua-Inject can be retro-fitted to most Farinograph-E models.

More accessories starting on page 30.



Watch video



Find out more

3-Phase-System

Comprehensive, integrated quality assessment (see page 17)

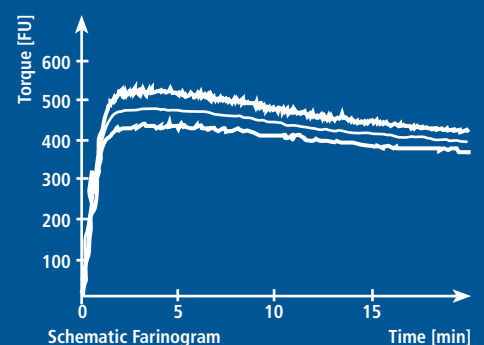
- Phase 1 – Farinograph
- Phase 2 – Extensograph
- Phase 3 – Amylograph

Standards:

- ICC Standard No. 115/1
- AACC Method No. 54-21.02, 54-22.01, 54-28.02, 54-29.01, 38-20.01
- ISO 5530-1

Download now:

Application Handbook
Learn more about the different applications and get more, exclusive downloads at the Brabender Partner Network.





Extensograph®-E

Accurate relevant determination of stretch properties and baking behavior

Measuring the stretch resistance and elasticity of dough – the Brabender Extensograph performs this task by providing inferences about the behavior of dough during the production of bakery and pasta products, e.g. during preparation, proving and baking in the oven. The process determines the optimal rheological baking results. The MetaBridge Controller also enables you to connect the Extensograph to the MetaBridge software.

Applications

- Dough

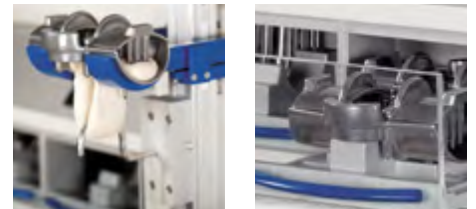


Interpretation of the data with reference to:

- Viscoelastic properties
- Enzyme activity
- Fermenting and baking behavior
- Gluten quality



Upgrade with
MetaBridge® Controller

Your Benefits

Best baking results

- Determination of the rheological optimum
- Identification and determination of the use of flour additives

Practically relevant analysis

- Modelling of fermentation times in modern production
- Logging of microbial and enzymatic processes

User friendliness

- Reproducible results
- Quick method including shorter measuring times available

Cost effectiveness

- Minimization of waste
- Enhancement of the addition of additives



Watch video



Find out more

Optional Accessories

(see page 31):

- Proving cabinet
- Micro-Extensograph

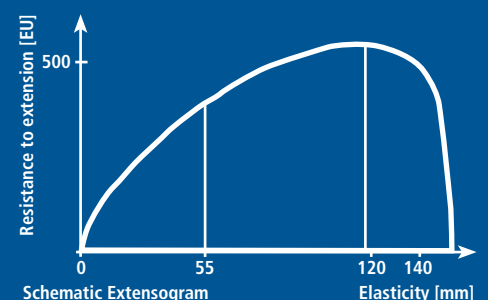
Standards

- ICC Standard No. 114/1
- AACC Method No. 54-10.01
- ISO 5530-2
- RACI, GB/T, GOST R, IRAM, FTWG, and others

3-Phase-System:

Comprehensive, integrated quality assessment (see page 17)

- Phase 1 – Farinograph
- Phase 2 – Extensograph
- Phase 3 – Amylograph



... where quality is measured.



Amylograph®-E

Let enzymes do the talking.

How suitable is your flour for baking? Enzyme activity (α -amylase) provides you with information about this. Our Amylograph delivers a reliable, reproducible picture of this enzyme activity for your flours and whole grains. It heats up a sample and analyzes the start of the gelatinization process (degrees Celsius), the gelatinization maximum (AU) and the gelatinization temperature – without damaging the starch. The gentle rise in temperature doesn't deactivate any α -amylases either before they have had a chance to have an effect. The measurement curve visualizes the effect of the enzymes and provides additional information.



Upgrade with
MetaBridge® Controller



Your Benefits

Simple test procedure

- Measurement probe placed in the product ensures precise temperature adjustment
- Reproducible measurement results
- Enzyme effect can already be tracked during measurement

Process control

- Optimum dosing of expensive enzymes
- Precise results in line with international standards
- No deactivation of α -amylases caused by rapid overheating

Applications

- Flour
- Starch
- Whole grains
- Wholegrain flours

What does the Amylograph-E measure?

- Gelatinization properties of starch

Interpretation of the data with reference to:

- Viscoelastic properties
- Enzyme activity
- Sprouting
- Baking behavior



Watch video



Find out more

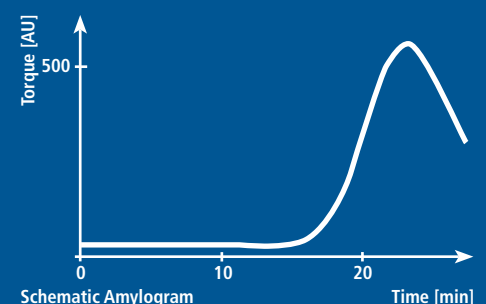
3-Phase-System:

Comprehensive, integrated quality assessment (see page 17)

- Phase 1 – Farinograph
- Phase 2 – Extensograph
- Phase 3 – Amylograph

Standards:

- ICC No. 126/1
- ISO 7973
- AACC Method No. 22-10.01
- AACC Method No. 22-12.01





3-Phase-System

This trio ensures comprehensive quality control!

These three instruments enable you to model the production process in a bakery on a laboratory scale and effectively control and test the quality of the processing properties of your raw materials.

You start with the Farinograph to determine the optimum quantity of water to add. During this initial phase you will also obtain information about the kneading properties of your dough, like for example dough development time and kneading stability.

The second phase of any modern bakery process consists of several individual operations that are interrupted by rest and fermentation times. The Extensograph was developed precisely for these production tasks and reflects the fermentation, stretching and baking behavior of the dough. Inferences can also be drawn from the diagram produced as to the expected bread volume.

The final baking process is visualized as the third phase by the Amylograph in the form of a graph. The parameters that are important for producing an optimum end product, namely starch gelatinization properties and enzyme activity, are recorded in a practically relevant way by slowly increasing temperature and automatically analyzed. This provides you with reliable statements about baking properties. You can connect your equipment to the MetaBridge software.

Applications

- Flour
- Dough
- Starch
- Whole grains
- Wholegrain flours



Your Benefits

Analysis in the MetaBridge software

- All measurement curves are clearly displayed in a single analysis tool

Practically relevant

- The combination of these three instruments provides you with valuable information about the production process.



Watch video

Optional

You can use the MetaBridge software and the MetaBridge Controller (see page 32) to customize your tests. You obtain non-device-dependent access to the analyses, simply via the Internet.

... where quality is measured.



Moisture Tester MT-CA

Test for moisture in up to ten samples simultaneously

This electronic moisture meter works on the drying chamber with circulating air principle and determines a sample's loss in weight resulting from the drying process. It can simultaneously analyze up to ten samples of very different kinds – no calibration and cooling down times required. A special heating method means that drying times can be cut by anything up to 20 minutes.



Applications

- Cereals
- Flour
- Starch
- Dough
- Pasta products
- Confectionery and snacks
- Tobacco
- Coffee
- Animal feed

Partners best with:

- Break Mill SM 4

Your Benefits

Time savings

- Simplified, software-controlled weighing-in process
- Rapid results delivered by special heating system
- No post-test cooling down times

Flexibility

- Free choice of drying duration and temperature
- Can be used for any material
- More than 1000 different methods can be programmed

Reliable results

- Automatic calibration before each test

Maximum user convenience

- Fully automatic reweighing after drying
- Recording of drying curves for optimum determination of test times for samples with high moisture content
- As many as 50 pre-installed methods



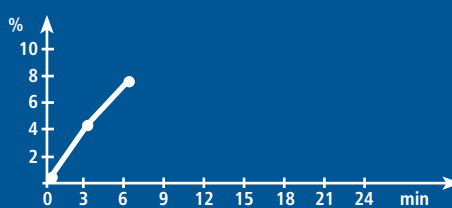
Watch video



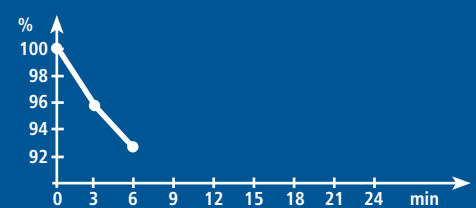
Find out more

Standards:

- ISO 712
- ICC-Standard No. 1110/11
- EN 12085 (ISO 182/2005)



Drying curve: weight loss



Drying curve: residual mass



Glutograph®-E

Your pasta dough and gluten quality tester

The Brabender Glutograph-E analyzes the quality of wet and dry gluten as well as of doughs by measuring the viscoelastic properties of a sample by shearing it. This separate gluten quality control method is particularly important if you use it as a flour additive. This measurement method is ideal for determining quality, for example, in bakery products and pasta production processes.

Applications

- Flour
- Gluten
- Dough
- Pasta products



What does the Glutograph-E measure?

- Stretching properties and elasticity characteristics
- Flour quality, suitability for pasta production
- Drying and heat damage caused to flour and dry gluten



Your Benefits

Simple and user friendly

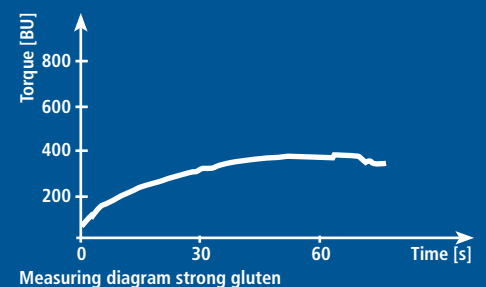
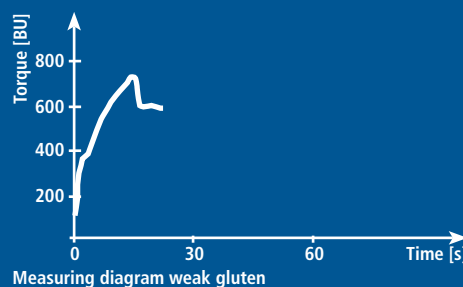
- Small sample sizes of 2 to 3 grams
- Touchscreen and compact design
- Short measurement times



Find out more

Analysis

The first part of the diagram shows the stretching of the sample (increase) and the second part shows how the curve drops according to how the sample retracts. The shearing time, i.e. the time until a specified deflection has been reached, is a measurement of the sample's stretching properties. The decrease in the deflection after a certain time shows the sample's elasticity (relaxation).



... where quality is measured.



ViscoQuick

The all-purpose instrument for quickly measuring viscosity

When 5 to 10 gram sample quantities are involved, the ViscoQuick, a compact all-purpose viscosity gage, quickly and reliably provides a basis for making decisions about the quality and usability of each raw material for any desired application. The ViscoQuick has a wide range of quality control, incoming and outgoing goods, production control and product/formulation development applications.



Applications

- Starch
- Various paste-like and viscose masses

What does the ViscoQuick measure?

- Viscosity properties of pasty and viscous materials, dependent on temperature
- Gelatinization properties of starch and other materials

Partners best with:

- Break Mill SM 4
- Moisture Tester MT-CA

Your Benefits

Space-saving alternative

- Integrated heating / cooling with no external thermostat

Time savings

- Fast heating and cooling rates

Cost savings

- Low sample quantities and a reusable measurement vessel / paddle

Flexibility

- Customer-specific speed / temperature profiles to match applications



Watch video



Find out more

MetaBridge Software

The ViscoQuick features the web-based Brabender MetaBridge software as standard, which supports all currently available tablets and smartphones (see page 34). The software records time, temperature and torque as a curve with the following analysis points:

- Viscosity increase (in the case of starch: start of gelatinization)
- Maximum viscosity (in the case of starch: maximum gelatinization)
- Viscosity at the end of the heating up phase
- Viscosity at the beginning and end of the cooling down phase

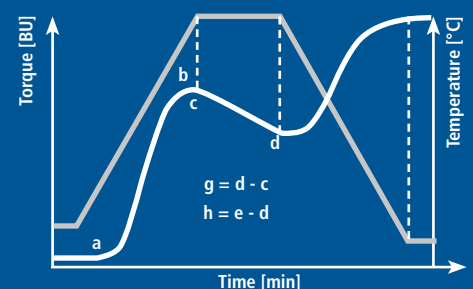


Diagram ViscoQuick

Viscograph®-E

The standard instrument for measuring the viscosity of starch

The Viscograph-E provides you with a full picture of the gelatinization behavior of native starch and all types of modified starch.



MetaBridge
Brabender



Applications

- Native starch (e.g. wheat, corn, potato, rice)
- Modified starch
- Industrial starch
- Extruded material
- Liquids, suspensions and pastes



What does the Viscograph measure?

- Gelatinization properties
- Hot and cold viscosity
- Resistance to acids
- Stability
- Swelling behavior

Your Benefits

User friendliness

- Automatic test procedure
- Any number of programs can be stored
- Comprehensive range of settings options
- Convenient conducting of tests
- Temperature reliability

Extensive test design options

- Variable heating and cooling rates
- Controlled heating up and cooling down
- Choice of measurement ranges
- Analysis in BU, mPas or cmg



Find out more

Micro Visco-Amylo-Graph®

Fast, accurate analysis of viscosity and enzyme activity

This 2-in-1 instrument enables you to measure the viscosity properties of flours and starches as well as of products containing flour or starch, like blanchmange or potato flakes. The Micro Visco-Amylo-Graph (MVAG) therefore combines the applications of the Viscograph-E and the Amylograph-E.



MetaBridge
Brabender



Applications

- Flour
- Starch
- Confectionery and snacks
- Animal feed



What does the MVAG measure?

- Gelatinization properties
- Hot and cold viscosity
- Resistance to acids
- Stability
- Swelling behavior



Interpretation of the data with reference to:

- Enzyme activity
- Sprouting
- Starch quality
- Starch properties
- Baking behavior

Your Benefits

Fast plus small samples

- Small sample sizes of 110 ml
- Shorter measurement times than with other methods thanks to faster heating and cooling rates

User friendly

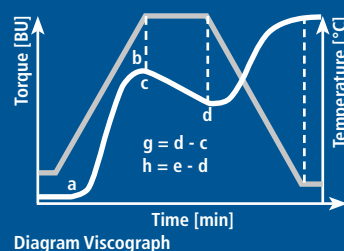
- Convenient measurement and analysis software
- Programmable speed and temperature profiles



Find out more

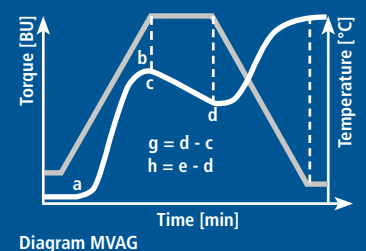
Standards:

- ICC No. 169
- AACC Method No. 61-01.01



Optional

You can use the MetaBridge software and the MetaBridge Controller (see page 32) to customize your tests. You obtain non-device-dependent access to the analyses, simply via the Internet.



... where quality is measured.



"If I conduct tests on extruders during ongoing operations, this causes interruptions to my operational procedures. I regard Brabender's laboratory extruders as a useful alternative for developing and testing products and formulations."

"I can thus experiment under close-to-actual processing conditions without my ongoing manufacturing operations being impaired. Flexibility of use, lower material inputs and no loss of production. I can therefore save on development costs and work efficiently."



Bakery and
Pasta Products



Cereals



Starch



Animal Feed



Confectionery



Miscellaneous

Extruded materials broaden your options

Brabender laboratory extruders broaden your range of options for developing new products or enhancing existing ones, without having a negative impact on your ongoing production process. Utilizing just a few parameters, extruders enable you to vary food textures and structures without altering the original formulation. Brabender extruders enable you to model close-to-actual production processes on a laboratory scale. They handle all process steps: feeding in, conveying, dispersing, reacting, degasifying and pressurization – everything in one operation.





TwinLab-F 20/40

The compact, flexible extrusion solution

The TwinLab-F 20/40 twin screw extruder is a space- and money-saving solution. It extrudes and texturizes different materials and is suitable, for example, for developing new products or enhancing existing formulations. You are given the option of transferring the parameters of an existing production extruder to the TwinLab and simulating your processes on a small scale.



Applications

- Confectionery and snacks
- Pasta
- Fish and animal feed
- Meat substitute products
- Flour
- Starch (corn, rice, potato, tapioca etc.)
- Legumes (e.g. peas and lentils)
- Cereals



For whom?

- Pasta industry
- Confectionery / snacks industry
- Meat industry
- Animal feed industry
- Research facilities
- Cereal producers
- Mills

Your Benefits

Versatility

- Six feeding options along the processing zone
- Screw details can be individually configured

Simple handling

- Patented liner removal for easy cleaning
- Hinged liner

Cost effectiveness

- Formulation adjustments and development of new products on a small scale

- Low consumption of possibly expensive formulation ingredients
- No interruption of production processes required
- Space-saving, compact design
- Various configuration options, e.g. motor output, liner temperature control etc.



Watch video



Find out more

Optional Accessories

From page 31 onwards



Stand-Alone Extruder KE 19

Our laboratory extruder for your product development processes

The Stand-Alone Extruder KE 19 helps you to develop new products. Its integrated drive mechanism and smart design means it takes up little space. It is therefore suitable for use as an inexpensive stand-alone solution for conducting laboratory-scale tests. You obtain informative results even from small sample quantities.



Applications

- Snack food
- Cereals
- Pasta



For whom?

- Pasta industry
- Confectionery / snacks industry

Your Benefits

Compact design

- Space-saving
- Robust

Cost effectiveness

- Most cost-effective version
- For small sample quantities



Watch video



Find out more

Optional Accessories

From page 31 onwards

... where quality is measured.

Extrusion Accessories

Dies

Dies help you to give your products the shapes you require. Brabender provides dies for all standard applications in the food and animal feed industry.

Modular Cooling Die

Processing proteins is playing an increasingly more important role in the food and animal feed industry. The Modular Cooling Die has been specially designed for laboratory-scale wet texturization of plant proteins. Its flexible design enables different product sizes (width / height) to be modelled. Six apertures for material temperature and pressure measurement deliver a full process control capability. The Modular Cooling Die consists of two half shells, which can be combined with one another depending on duct dimensions. Three temperature zones are available for independent temperature control via a thermostat.



Other Dies:

- For ribbon-like products: ribbon die head
- For pasta production: noodle die head
- For round-strand products: round strand die head
- For macaroni and similarly shaped products: tubing die head

All dies are available in a range of different sizes.



Conveyor Belt

The conveyor belt enables you to transport extruded profiles and profile strands. It can be combined with any Brabender extruder, is height-adjustable and features continuous speed adjustment.



Other Accessories:

- Various thermostats (on request)
- Pressure transducers
- Thermocouples
- Cutting device
- Volumetric and gravimetric feeders

Screw Configuration

Screw configuration is an integral part of the design of an extruder. It influences the processing environment and therefore product characteristics. Brabender provides a range of different screws for single-screw extruders. A wide range of configurable screw elements are available for twin-screw extruders.



Configuration software for twin screws:

The screw configuration software program enables you to configure extruder screws to match your application and archive successful configurations.

Twin extruder screw details that can be custom-configured:

- Conveyor elements
- Kneading blocks
- Inverse elements
- Tooth mixing elements



Our Pump Recommendations:

Pump	Feed Quantity	Pump System	IP Protection Class
Watson Marlow 120U	0.003 to 54 ml/min	Automatic control, five different pump heads	IP31 / NEMA 2
Watson Marlow 520U	0.004 to 3.5 l/min	Pump heads for different applications	IP31 to BS EN 60529

... where quality is measured.

"I regard user friendliness as top priority if I want to operate an instrument. The software in Brabender instruments is intuitive and easy to understand. This enables me to conduct my laboratory tests without any problems."

"The Brabender MetaBridge software in particular makes my daily lab routines easier. My instruments are inter-linked and I can access up-to-date measurement results in one central location from anywhere, even using a tablet or smartphone."



We don't leave you to your own devices

Specific materials require customized solutions. We at Brabender are well aware of that and can provide you with a wide range of accessories to enable you to use our instruments in accordance with your needs. Should you not be able to find an appropriate feature in our range, we can certainly advise you on alternatives from partner companies to provide our expertise in regards to pumps and scales that can be attached to our instruments.

User-friendly handling also includes excellent software. This is where the Brabender MetaBridge sets standards, be it as a standard software program or as an addon for older Brabender instruments. Interlinked, location-independent versatile and simple – that's the modern way of working. From test set-up through documentation and archiving, you will find that the MetaBridge software forms an excellent platform for the tasks you need to perform.

We would be delighted to advise you, should you require our support with developing applications. You are very welcome to visit our application laboratory in Duisburg to compare note with our experts and to benefit from our experience.

Rheology Accessories

For the Farinograph-TS, -E and -AT



Measuring Mixer S 300

- For standard Farinograph test (300 g) in line with ICC, AACC, ISO
- Also for kneading dough for Extensograph tests
- Removable blades



Accessories for Measuring Mixer S 300:

- FarinoAdd-S300 to test the quality of kneadable doughs and gluten-free flours

For Farinograph-E and -AT



P 600 Planetary Mixer

- For rye doughs and short pastry doughs
- With dough hook, dough beater, balloon whisk



Measuring Mixer S 50

- For standard Farinograph test (50 g flour) in line with ICC, AACC, ISO
- Removable paddles



Hardness & Structure Tester

- To test hardness of cereals (wheat, barley, malt etc.)
- Special software



Measuring Mixer S 10

- For standard Farinograph test involving small sample quantities (10 g)
- Suitable for breeders and R&D purposes



Chocolate Mixer (only Farinograph-E)

Select suitable raw materials for chocolate applications, using the Chocolate Kneader in conjunction with the Brabender Farinograph-E – your reliable quality assurance partner.

Other Accessories

For Farinograph



Accessories:

- T 151-E Thermostat, others on request
- Sartorius laboratory scales (on request)



T 151-E Thermostat

For Extensograph-E

Proving Cabinet

The add-on external proving cabinet for the Extensograph consists of three temperature-controlled chambers with accessories.



Micro-Extensograph – Conversion kit for small samples

- Turn your Extensograph into a Micro-Extensograph in a few simple steps
- Suitable for samples weighing just 20 grams (instead of 150 grams)
- Rapid conversion (five minutes)
- Two instruments in one

... where quality is measured.

MetaBridge & MetaBridge Controller

All in one: measuring, analyzing and managing

Be it rheometer, viscometer or extruder – Brabender instruments and users are merged to form an integrated network. All users can access any instrument or even operate several instruments at any time – this system is web-based and does not require software to be installed. You can therefore actively monitor measurements or access older measurement results – anytime, anywhere. Prepare your tests using a menu-driven specification function, save and centrally manage your measurement data. Consistent documentation is therefore always guaranteed.



Your Benefits

Simplicity

- Touchscreen operation

Customization

- Plenty of customization options, e.g. custom protocol parameters

Error avoidance

- Automatic default settings for specific instruments

Recognition factor

- Same standard user interface for all end devices

Cost savings

- No additional readers required

Documentation

- Measurement data is available at any time, even retrospectively

Contact option

- Direct feedback with just one click



Which features?

- Menu-driven preparation and conducting of tests
- Automatic default settings
- Interactive measurements
- Live monitoring of measurements with realtime display
- Administrator mode that enables user management
- Centralized saving and management of tests
- Information sharing between users
- Feedback to Brabender



MetaBridge Controller:

The MetaBridge Controller also turns older-generation Brabender instruments into "smart" ones. It enables existing instruments to be upgraded to be MetaBridge software-compatible.



Watch video

Food Lab

We test together with you and on your behalf

Why not benefit from our many years of experience and visit our application laboratories to familiarize yourselves with instruments from the Brabender portfolio. We test which instrument is most appropriate to your raw materials and products. Our team would be delighted to answer your questions about the instruments and about method development.



Milling Lab:

We are able to prepare your samples appropriate to their application in our Milling Lab. We have a number of lab mills available for this purpose.



Rheology Lab:

Our Rheology Lab houses rheological instruments as well as other equipment to analyze raw materials and products, e.g. to analyze material moisture.



Baking Lab:

We conduct baking tests in our Baking Lab.



Extrusion Lab for food and animal feed:

The Extrusion Lab features single- and twin-screw extruders as well as matching peripherals. Extrusion tests can be conducted on a laboratory scale, in order to determine the optimum configuration for your raw materials and products.

... where quality is measured.



5-Star Service

We are at your service

We regard customer service as the key element of any customer relationship. That is why we are at your service – seven days a week, 24 hours a day, on the phone or on site. We come to you for inspections, maintenance and repair work. You can purchase premium-quality spare parts and consumables from our expert staff. We make sure that your down-times are kept as short as possible. Upgrade kits ensure that older-generation instruments perform new functions and that they are always state-of-the-art.



The services we provide to you

On-site service

- Inspection, maintenance, and repairs

Factory service

- Repairs and instrument reconditioning

24/7 Service Line

- Your quick contact for spare parts, configurations and service appointments

Value Added Services

- Software update agreements, reference materials, inspection/maintenance agreements, emergency service, remote maintenance, mentoring, service-related training

Reference material subscriptions for Brabender measuring instruments

- Verifiable, sustainable precision measurement

Spare Parts

- Spare parts, consumables, upgrade kits, spare parts logistics service

Technical Specifications

Milling, rheology, moisture	Mains connection (V)	Mains connection (Hz)	Speed	Dimensions (W x H x D in mm)	Weight (approx. kg net)
GlutoPeak	230 115	50/60 Hz + N + PE; 1.25 A; 0.3 kW 50/60 Hz + PE; 2.5 A; 0.3 kW	–	490 x 938 x 350	35
Quadrumat Junior	230 230	50/60 Hz + N + PE; 1.5 A 50/60 Hz + PE; 1.5 A UL	–	515 x 720 x 740	119
Quadrumat Senior	3 x 230 3 x 400	50/60 Hz + PE; 2.8 A 50/60 Hz + N + PE; 1.6 A	–	940 x 1820 x 530	300
Sedimat	3 x 230 3 x 400	50/60 Hz+ PE; 2.0 A 50/60 Hz+ N + PE; 1.1 A	–	380 x 620 x 610	50
Bran Duster	3 x 230 3 x 400	50/60 Hz+ PE; 2.4 A 50/60 Hz+ N + PE; 1.4 A	–	670 x 330 x 370	37.5
Break Mill SM 4	230 115	50 Hz + N + PE; 1.9 A 60 Hz + PE; 3.1 A	–	148 x 517 x 230 with feed hopper	7
Rotary Mill	3 x 400 3 x 230	50/60 Hz + N + PE; 2.6 A 50/60 Hz + PE; 4.7 A	–	365 x 735 x 625	79
Farinograph-TS	230 115	50/60 Hz + N + PE; 5.2 A 50/60 Hz + PE; 10.4 A	–	420 x 553 x 700 (without touchscreen) 470 x 553 x 700 (with touchscreen)	40
Extensograph-E	230 115	50/60 Hz + N + PE; 3.2 A 50/60 Hz + PE; 6.3 A	–	Instrument with tray holder arms, without rack 850 x 450 x 630 Space required (at table edge, with rack) 850 x 1000 x 630	75
Amylograph-E	230 115	50/60 Hz + N + PE; 2.8 A 50/60 Hz + PE; 5.6 A	Standard 75 min ⁻¹ Selectable 0 to 300 min ⁻¹	490 x 890 x 400	30
MT-CA	220/230 115	50/60 Hz + N + PE; 7.5 A 50/60 Hz + PE; 14 A	–	680 x 800 x 630	80
Glutograph-E	230 115	50/60 Hz + N + PE; 1.0 A 50/60 Hz + PE; 1.0 A	–	290 x 320 x 340	12
ViscoQuick	230 115	50/60 Hz + L + N + PE; 3 A 50/60 Hz + L + N + PE; 6 A	0 to 500 min ⁻¹	430 x 350 x 640	36
Viscograph-E	230 115	50/60 Hz + N + PE; 2.8 A 50/60 Hz + PE; 5.6 A	0 to 200 min ⁻¹	560 x 890 x 430	30
MVAG	230 115	50/60 Hz + N + PE; 2.8 A 50/60 Hz + PE; 5.6 A	0 to 300 min ⁻¹	450 x 750 x 380	30
Muffle Furnace	220/230	50/60 Hz + N + PE; 16 A	–	750 x 580 x 720	80

Laboratory extruders	Max. torque (Nm)	Max. temp. (°C)	Max. output (kg/h)	Dimensions (W x H x D in mm)	Weight (approx. kg)
TwinLab-F 20/40	40	400	1 to 20	2013 x 606.5 x 1566	480
KE 19	100	450	1 to 10	1005 x 440 x 1400	156

... where quality is measured.



Brabender 5-Star Service

Always up-to-date with our services

www.brabender.com/en/service/



Customer and Technology Centre

Application laboratories for food

www.brabender.com/en/food/contact-details/services-application-lab-food/#el



Calibration Kit

Reference material for Brabender equipment

www.brabender.com/en/service/range-of-solutions/products/brabender-calibration-kit-food/



... where quality is measured.

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