

Flour & Dough Testing

micro - doughLAB



Benefits:

- Small (4 gram) Sample Size
- Correlates with Standard Tests
- Programmable Mixing Speed
- Easy to Use

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The micro-doughLAB is a small scale (4g) dough mixer and analysis system to determine the quality and processing characteristics of flour and dough. The small sample size is ideal for researchers, wheat breeders, grain handlers, millers and bakers with limited sample and/or valuable samples. It can be used to screen breeder lines, develop rapid and small scale methods and to establish the performance, specification, water and mixing requirements of flour. It enables users to save time and money by accurately and quickly identifying the best flour for their application. The micro-doughLAB operates from PC with doughLAB for Windows (DLW) software. The micro-doughLAB is easy to use, compact, reproducible, accurate, and cleans up quickly.

Features and Benefits

- Small Sample Size: Integrated 4g micro scale bowl.
- High Speed Mixing: To emulate commercial grade mixers, incorporate ingredients, develop difficult samples and reduce standard test time to 10 minutes.
- Variable Speed & Temperature: Research dough response to stress.
- Automated: Integrated automatic water dispensing for repeatable, operator independent measurement of water absorption.
- Easy Clean Up: Bowl disassembles quickly for easy cleaning to increase sample throughput.
- User Friendly: Windows software with standard and customizable methods, real time graphs, data analysis, diagnostics and virtual blending function.
- Traceability: Traceable software calibration.
- Secure Results: Password protection and single page report with traceability data to comply with Electronic Registration/Electronic Signature requirements.



Applications

- Early Stage Breeding: Small scale test to screen breeder lines with desired quality traits.
- Rapid Small Scale Methods: Correlate with standard methods.
- Quality: Verify performance and specification of flour.
- Analysis: Includes: Water Absorption, Dough Development Time, Arrival Time, Departure Time, Stability, Softening, Mixing Tolerance Index, Peak Energy and Bandwidth at Peak.
- Products: Wheat meal, flour, semolina, additives, rye, durum, triticale and other grains and flours for milling, baking (bread, cake, pastry, biscuit), pasta and Asian products (steam bread, noodles and flat bread).

Specifications

Power Requirements: 240/115 VAC, 3A, 50/60 Hz.
 Computer Requirements: PC with Windows XP (SP3) or Windows Vista operating system.
 Dimensions (HxWxD), Net Weight: 380x320x550 mm, 25 kg.
 Temperature Range: Depends on external water bath*.
 Speed Range: Computer controlled infinitely variable 0 – 200 rpm.
 Speed Accuracy: +/- 1% at 63 rpm.
 Torque Range: 0 – 1000 mNm.
 Torque Accuracy: +/-10 mNm at 1000 mNm.
 Dispenser Range: 0 – 5 ml.
 Dispenser Accuracy: +/- 0.01 ml.

* External water bath needed for temperature control.

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