



“ High quality equipment is essential to obtain accurate analytical results. ”

Equipment

When performing an analytical test, strong focus has to be put on the equipment used to obtain accurate and reproducible test results. The first step of any analysis is the use of a well-established sampling plan to obtain a representative sample. After taking the representative sample – for instance, consisting mostly of several aggregated subsamples taken out of a large storage tank – appropriate sample preparation is vital.

This lab sample needs to contain the same concentration of the analyte as the sample from which it was taken. To achieve this goal, two steps are required. First, the representative sample needs to be ground and then a small analytical sample needs to be taken. This is done by using equipment such as mills and/or subsampling devices.

Romer Labs® offers a range of equipment for such analytical purposes, including Romer Mills for grinding and sample division and the Romer Evap® System for the rapid concentration of sample extracts.

Furthermore, quantitative and/or semi-quantitative analyses often require additional equipment for result interpretation. For instance, Romer Labs® offers the AgraVision for lateral flow test interpretation and StatFax or ChroMate from Awareness Technology, Inc. for ELISA quantification purposes.

Last but not least, aflatoxin analysis by HPLC-FLD requires derivatization of the analytes for higher sensitivity; a task made possible by Romer Labs® photo chemical or electrochemical derivatization units.

Equipment



Laboratory Equipment

Item No. Description

Romer Mills

Romer Series II® Mill⁷

EQMMS2010	Series II® Mill, 115V
EQMMS2015	Series II® Mill, 230V, American Plug
EQMMS2018	Series II® Mill, 230V, European Plug

The patented Romer Series II® Mill can prepare a representative sample quickly and easily. A 2 lb. (1 kg) sample of corn can be ground and subsampled within 1 to 2 minutes. This mill simultaneously grinds and splits the samples and is the only mill available that combines these two steps into one piece of equipment. The Series II® Mill is USDA/GIPSA approved and is used mainly for grains, feeds and foods.

RAS® (Romer Analytical Sampling) Mill⁷

EQMMR1010	RAS® Mill, 115V
EQMMR1017	RAS® Mill, 230V

The RAS® Mill has been specifically developed for products that are difficult to grind due to high moisture and/or high oil content. Among these products are cottonseed, tree nuts, peanuts and pistachios. A 2 lb. (1 kg) sample of corn can be ground and subsampled in 1 minute. Special features include the availability of 2 unique chute options (to allow more rapid and accurate grinding and sampling), interchangeable grinding burrs, and power drive screws to allow the grinding of practically any product. The moving parts are made of stainless steel and flashed chrome for food safety analyses. The RAS® Mill is ideal for use in all labs where grinding and subsampling is essential, from pesticides to mycotoxins, moisture and proteins.

Reader

StatFax ELISA Reader (Awareness Technology, Inc.)

EQOLE4700	Stat Fax 4700 ELISA Reader
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The StatFax ELISA Reader is a microstrip reader intended for in-vitro diagnostic use. It is a compact, microprocessor-controlled, photometer system designed to read and calculate the results of endpoint colorimetric assays, which are read in microtiter strips. All AgraQuant® ELISA test kits featuring breakaway strips can be read by a Statfax ELISA Reader.

ELx800 UV Reader (BioTek Instruments Inc.)

EQOLE1495	BioTek® ELx800 UV Absorbance Microplate Reader
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The ELx800 UV is a compact microplate reader that measures in the UV as well as in the visible range. The standard filters 340, 405, 490 and 550 nm are included. It reads 96 well microplates in 30 seconds and comes with Gen5 RC Software. All EnzymeFast® Test Kits can be read using the ELx800 UV reader.

ChroMate ELISA Reader (Awareness Technology, Inc.)

EQOLE1408	ChroMate ELISA Reader
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The ChroMate ELISA Reader is a compact and economical 8-channel microplate reader, intended for in-vitro diagnostic use. It reads a 96 well plate in 12 seconds and comes with versatile and flexible software. All AgraQuant® ELISA test kits can be read with the ChroMate ELISA Reader.