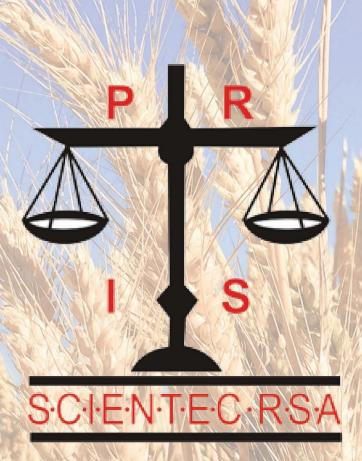
# PRODUCT CATALOG MILLING



PETER RASSLOFF
INSTRUMENTS &
SERVICES

Meet our Team



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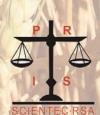
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# PETER RASSLOFF INSTRUMENTS & SERVICES

## COMPANY PROFILE PETER RASSLOFF INSTRUMENTS & SERVICES

Peter Rassloff Instruments & Services (Cape) cc was found in 1976 in Johannesburg, South Africa, as a service orientated company, servicing and repairing instruments used in the Wheat and Maize Milling Industry. The company progressed rapidly into sales of laboratory/testing equipment needed in that industry, as well as into selected other analytical product.

We have established a Johannesburg branch in 2005.

We are the leading supplier and manufacturer of laboratory equipment, needed for the quality control and measurement of required parameters in the agricultural industry in Southern Africa. We are specialized in the field of Wheat – Maize – Soya – Sorghum and allied products when it comes to establish Moisture – Fat – Fibre – Protein – Bulk Density – Alpha Amylase and other parameters in these products, right from the harvesting to grade the products in silos, to the milling industry or converters of the raw grain, as well as the bakeries. We manufacture locally in South Africa as well as import products from around the globe.

In 2015 we have relocated to Johannesburg. We have established a first class product service and repair credential throughout South Africa, Zambia, Zimbabwe, Malawi, Lesotho, Mozambique, Tanzania, Botswana and Swaziland and are also involved in Nigeria and Kenya. Our staff is highly trained, efficient and is willing to go the extra mile to offer our clients the most cost effective products

Our Service Technicians travel these countries frequently either on fixed pre-arranged service / calibration contracts, fully equipped to do service on site, as well as often have special call outs for breakdown repairs.

Besides new equipment we are highly organised in locating, refurbishing and calibrating of used equipment, which we are proudly offering at low prices. Please do not hesitate ask for details on what is presently available.

Our qualified Sales Engineer travels these countries at least twice a year to give advice and information on latest equipment available and/or product training.

In house sales and coordinating staff is highly trained and competent in all aspects of product requirements as well as of shipping and document requirements when export/importing.

FOR ANY PRODUCTS NOT LISTED IN OUR CATALOGUE
PLEASE DON'T HESITATE TO CONTACT US



#### Vacuum Sampler e-Vac

- The wheat ,corn and other grain can be transferred from storages automatically by vacuum and stored into the sample container.
- For wheat and other grain samples, the device can be operated by mounting a grain accessories to the device.
- 5 aluminium pipes, 1 aluminium bend, 1 pushing-pulling material, 1 pipe expanding wrench and 1 bag are supplied with it.
- The length of the pipes are 1 m.
- Portable• All parts are mounted to Sampler such as pipes,bend,pushing –pulling material and pipe expanding wrench
- After equipping all parts with at least one pipe ,it is immersed in the grain storage.
- Using 0-1 (On-Off) switch, system can be operated
- Grain is transferred automatically by vacuum and stored into the sample container
- Then the sample is taken out from sample container for further analysis.
- When you switch Off the device System stops vacuuming



#### **BULKPROBES-BAG PROBES**

Sample taking. Grain Bulk Probes – 2.1 m. – 1. 5 m. Stainless Steel



#### Mechanical sample divider

Made from stainless steel Available in four sizes: 3, 5, 10 and 18 liters Three different numbers of slots: 10, 18 and 34 Different slot widths: from 9.8 to 29.0 mm Also suitable for granulates, flour and powder



#### Vario sample divider

The standard machine for grain recording.

The quickest way of dividing samples in a representative way Large filling funnel
Infinitely adjustable dividing ratio
Models for 1 to 8 subsamples

Extremely good static distribution of the different sample parts



#### Stainless Steel Sample Splitter

Various sizes available



## P R I S SCIENTEC RSA

## **MILLING**

#### Sample Divider DV2

- Made up of brass and copper.
- No corrosion.
- The sample to be analyzed is placed in the hopper.
- It is dispersed over the cone.
- It divides the grain into two equal parts homogeneously



#### WHEAT, MAIZE AND SOYA GRAIDING SIEVES SIEVES

Stainless steel 1.8 mm whet and sunflour sieve (back) 6.35 mm maize sieve (front)4.75 mm Soya sieve1.5 mm Oats and also we supply 8.0 mm sieves on request



#### MLN sample cleaner

The cleaning procedure essentially corresponds to that of a normal process cleaning machine Fully automatic cleaning With deawner and aspiration Quick sieve changeMaintenance-free

#### Usage area:

The proportion of impurities (coarse particles, fine particles, aspiration discharge) and the proportion of quality grain can be determined directly upon receipt using a sample. This makes it possible to accept quality grain and reject batches that do not fulfill the contractual conditions in a targeted way.





#### **Hectoliter H1**

- Hectoliter is the weight of a one liter of kernel such as wheat, corn, etc.
- A very important quality parameter at purchasing points.
- The result depends on the particle size, density and the kernel quality .
- The system is composed of a digital balance, a knife and a float.
- Conforms to standarts having an exact 1 liter of volume.
- Short analysis time.

#### **Hectoliter RSA**

- Hectoliter is the weight of a one liter of kernel such as wheat, maize.
- A very important quality parameter at purchasing points.
- The result depends on the particle size, density and the kernel quality .
- Conforms to standarts having an exact 1 liter of volume.
- · Short analysis time.





#### **Granomat**

Whole grain moisture meter
Large sample volume of 600 ml
Sample does not require crushing
Integrated printer
Fully automatic
Corresponds to the current Standard Weights and Measures Law in Germany,
Austria and other European countries.





#### HE 50

Grain moisture meter for agriculture.

Precision for the most important reference variable in combine harvesting – reliability during threshing, drying and storage.

Easy to operate

Fast measurement

Automatic temperature correction

Wide measuring range of more than 30 % moisture content

14 products can be read off directly

#### **HE lite**

Portable and robust moisture meter
The moisture content is crucial for determination of the correct harvesting time
High measuring range
Simple menu navigation
Well-tried measuring principle
Average calculation
Adjusting facility





#### **Farmpro**

The Farmpro is a robust tool, offering a unique built-in grinder made of hardened galvanized steel and a casing made of shockproof ABS plastic. The sturdy design makes the Farmpro safe for transport on the tractor, in the granary, etc. The Farmpro is easy to carry and handle in or outside. Local language in the display, pre-programmed crops, automatic temperature compensation and calculation of average value make the Farmpro quick and easy to use.



#### **Farmpoint**

Effective grain storage is essential to maintain crop quality and prevent losses. Reliable moisture management is vital to ensure an optimal storage environment. Farmpoint is the original whole grain moisture meter that operates using high frequency measurement, compression of the sample and automatic temperature compensation, for more reliable results. The fail proof design makes it easy to test the grain whenever and wherever.





#### Superpro Combi

Effective storage is essential for ensuring the bale quality and preventing loss of product. Accurate temperature and moisture management is the key to safe storage. The Superpro Combi is a new generation of digital moisture analyzers that gives consistent test results. In a single operation, the portable Superpro Combi moisture analyzer measures and calculates the average value of the bales. This, along with the adjustment of calibration to compensate for bale density variation, ensures that the stainless steel probe delivers more reliable results.

#### <u>Superpro</u>

Effective grain storage is essential for ensuring crop quality and preventing loss of product. Accurate moisture management is key to safe storage. The Superpro is a new generation of digital grain moisture analyzers that gives consistent test results. In a single operation, the portable Superpro moisture analyzer grinds and compresses the grain. Along with automatic temperature compensation, the built-in grinder leads to more reliable results.





#### **Contador**

Seed counter
Counting and filling of all seeds from 0.3 mm to 15 mm
Fast counting speed
Exact counting results
Flexible due to easily changeable feed container
All functions can be controlled via PC software
Little inherent noise

#### **Sortimat**

Laboratory sorting machine
Sorting and appraisal of grain
Determination of the full barley proportion
Tiltable sieve stack and sieve cleaning
Available with 3, 4 or 5 sieves
Robust and solid construction
Official method in accordance with MEBAK, EBC and ICC





#### SGrain Near Infrared Grain Analyzer

Infracont SGrain is a portable NIT (Near Infrared Transmission) grain and flour analyzerdesigned to analyze whole grains and oil seeds as well as flour content parameters.

Infracont SGrain is the only portable grain analyzer in the world operating with a high-precision scanning grating monochromator optics inside and with a built-in printer.

Besides this, Infracont SGrain is the only portable grain analyzer in the world that can be used to analyze wheat flour, soymeal, and other powdery materials.

Infracont SGrain is the only portable grain analyzer in the world that provides the highest accuracy by applying a high-precision scanning grating monochromator optics inside. The unique optical technology of Infracont called SBCS - Single Beam Compensation System ensures the excellent short and long-term stability of SGrain.

Infracont XGrain and SGrain instruments can be used to analyze the composition of grain and flour without sample preparation. The devices primarily serve to measure protein, moisture, gluten, ash, and oil content, but the Zeleny index can also be measured. Main application areas of the instruments are: Grain production Grain receival and storage Grain trade, Milling, Bakery, Pasta manufacturing, Soybean pressing and extraction Raw material analysis for animal feed





#### XGrain Near Infrared Grain Analyzer

Professional Near Infrared Transmission grain and flour analyzer for analyzing whole grain cereals and oil seeds as well as flour content parameters with a built-in hectoliter weight module. An additional feature is the built-in printer, so the hectoliter weight values can be automatically printed to the receipt together with the other measured content parameters.

Infracont XGrain and SGrain instruments can be used to analyze the composition of grain and flour without sample preparation. The devices primarily serve to measure protein, moisture, gluten, ash, and oil content, but the Zeleny index can also be measured. Main application areas of the instruments are: Grain production Grain receival and storage Grain trade Milling Bakery Pasta Manufacturing Soybean pressing and extraction Raw material analysis for animal feed.

Infracont XGrain and SGrain instruments are spectrophotometers operating in the Near Infrared (NIR) wavelength range. Infracont grain analyzers are transmission mode (NIT - Near Infrared Transmission) instruments that apply light of 780-1064nm wavelength range for the measurement. Some biological materials, like grains and flours transmit light of the above wavelength range in a measurable extent.

## P R I S SCIENTEC-RSA

## **MILLING**



#### **Granolyser**

NIR analyzer for grain, oil seeds and legumes

Determines all of the parameters for your sample quickly and accurately, Large sample volume of 600 ml

NIR (near infrared) diode array technology 1500 individual scans per sample Corresponds to the current Standard Weights and Measures Law in Germany and Austria.

Touch screen display and built-in printer

#### **Function**

Pour the sample (600 ml) into the Granolyser. The start and settings for the measurement are carried out on the touch screen. The transport wheel ensures that the density is consistent during the measurement. The sample is continuously moved past the detector, and the reflection of the sample in the NIR range is measured. The built-in spectrometer scans within the range of 950 to 1540 nm (NIR). The spectrums recorded by the detector are processed by the evaluation electronics.

The analysis parameters are optically determined in less than one minute. Different parameters are determined depending on the selected product: Moisture, protein, sedi, gluten, oil content and starch. The measurement result is displayed and can be printed out.

#### Connectivity

The Granolyser has a network connection and a USB interface for a bar code scanner, keyboard or USB data memory. It can store measuring data in the LAN of an MS Access® database using the Granolyser Data Server application. A database connection can be established quickly using an interface. For simple processing using the PC (e.g. with MS Excel®), all measurement data can also be exported onto a USB data memory

#### **Granolyser HL**

NIR analyzer with bulk density module Increase the efficiency of your grain analysis. All NIR parameters and

bulk density Corresponds to the current Standard Weights and Measures Law in Germany and Austria.

Results in less than 60 seconds

User-friendly

software, available in 18 languages

Touch screen display and built-in printer

#### Function

The Granolyser HL supplements the well-tried NIR analysis device with a module for bulk density.

A large sample (600 ml) is poured in. The touch screen is used to start the measurement and make the required settings. A long-life halogen lamp with controlled light intensity illuminates the sample.

The sample material is continuously transported, the reflection of the sample is scanned in the NIR range and the material is then poured into the bulk container. The weight of a 500 ml sample is determined using an integrated weighing system. As well as different grain types (wheat, rye, barley and maize) oil seeds (rapeseed and sunflower seeds) can also be measured.

Cereal legumes such as peas and broad beans can also be measured. The important parameters of moisture, protein, sedi, gluten, oil content and starch are supplemented by the hectoliter weight (bulk density) in the Granolyser HL. The measurement result is shown on the display and printed out.

The Granolyser HL with LAN and USB interfaces also has the same connectivity as the Granolyser.





#### Touch Screen Gluten Washer (Glutomatic) GW 3200

- · CE Certified.
- New design, Touch Screen Gluten Washer. First ever in the World
- Conforms to Official World Standards (AACC No:38-52, ICC No: 155 &158,137/1).
- · Automatic Dual Chamber System.
- Ease of Use.
- · Stainless steel box. No corrosion!
- Measures wet gluten quantity of the wheat meal, wheat flour, durum, semolina and wheat gluten.
- Measures both ground grain and flour at breeders, grain traders, flour mills, flour users, wheat gluten manufacturers, pasta manufacturers and bakeries.
- Two different test methods in the same system.
- Rapid analysis. A complete test takes less than 7 minutes.
- Adjustable mixing and washing time by setting menu on Touch Screen Display.
- Possibility to adjust mixing time from 5 up to 75 seconds and washing time from 60 to 900 seconds.
- · Robust Design.
- Specially designed holes at the bottom panel enabling device to discharge the water, in case of water pump tubes deterioration.
- · Segregation of grain and flour in terms of wet gluten amount





#### Gluten Washer (Glutomatic) GW 2200

- · CE Certified.
- Conforms to Official World Standards (AACC No:38-52, ICC No: 155&158, 137/1).
- Automatic Dual Chamber System.
- · Ease of Use.
- Stainless steel box. No corrosion!
- Measures wet gluten quantity of the wheat meal, wheat flour, durum, semolina and wheat gluten.
- Measures both ground grain and flour at breeders, grain traders, flour mills, flour users, wheat gluten manufacturers, pasta manufacturers and bakeries.
- Two different test methods in the same system.
- Rapid analysis. A complete test takes less than 7 minutes.
- Adjustable mixing and washing time by means of dip-switches
- Possibility to adjust mixing time from 5 up to 75 seconds and washing time from 60 to 900 seconds.
- Robust Design.
- Specially designed holes at the bottom panel enabling device to discharge the water, in case of water pump tubes deterioration.
- Segregation of grain and flour in terms of wet gluten amount

#### Touch Screen Gluten Index GI 3030

- CE certified.
- New design with 5 inch Touch Screen Display, First ever in the World!
- Displays real rotation rate on display, First ever in the World!
- Ease of use, thanks to Touch Screen Function
- Centrifuges the wet gluten using prepared standardized method (ICC and AACC Standard methods).
- Gluten is centrifuged to force wet gluten through a specially constructed sieve under standardized conditions.
- The special sieve allows for the collection of both the part of the gluten that remains on the sieve and the part passes through the sieve.
- Performs the test for 1 minutes rotating at 6000 rpm.
- · Stops automatically with a warning signal.
- Locking safety lid provides safe operation.





#### Gluten Index GI 2030

- CE certified.
- The special sieve allows for the collection of both the part of the gluten that remains on the sieve and the part passes through the sieve.
- Blue Color LCD Display
- Centrifuges the wet gluten using prepared standardized method (ICC and AACC Standard methods).
- Gluten is centrifuged to force wet gluten through a specially constructed sieve under standardized conditions.
- Possibility to see Test Time, Company Name, Ambient Temperature.
- Performs the test for 1 minutes rotating at 6000 rpm.
- · Stops automatically with a warning signal.
- · Locking safety lid provides safe operation.







#### **Dry Gluten DG (Glutork) 2020**

- · CE certified.
- Heater and control units are separate.
- Possibility to see the test time on digital display.
- Dries gluten of wheat and flour samples.
- Operating temperature is 150°C.
- Temperature is kept stable by means of a thermostat.
- Teflon coating provides effective drying and easy removal of sample being tested.
- Stops automatically warning with a beep signal.

#### Falling Number 8100

- CE certified
- New design Falling Number, 7-inch Touch Screen Display on the side.
- 3 different themes of display
- All function buttons are one touch away. Easy to use.
- Measures FN conforming to international standards (ICC and AACC Standard methods).
- Single Analysis System
- Segregation of sound and sprouted grain to save money and ensure quality
- · Possibility to perform;
  - -Classical Falling Number Test in wheat flour and meal.
  - -Falling Number Test in wheat flour with Altitude Correction,
  - -Falling Number Test in meal of wheat, durum, rye and barley with Altitude Correction,
  - -Fungal Falling Number Test to detect alpha amylase enzyme activity which is added to flour
- · Automatic altitude correction and automatic recalculation of FN results
- Moisture FN, Moisture GR, Mean Value, Liquefaction Number
- Calculation of Blends, Sample ID
- LAN connection
- Optional Print Out
- Archive



#### Falling Number 8200

- CE certified
- New design Falling Number, 7-inch Touch Screen Display on the side.
- 3 different themes of display
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  - -Fungal Falling Number Test to detect alpha amylase enzyme activity which is added to flour
- Automatic altitude correction and automatic recalculation of FN results
- · Moisture FN, Moisture GR, Mean Value, Liquefaction Number
- · Calculation of Blends, Sample ID
- LAN connection
- · Optional Print Out
- Archive



#### Falling Number FN 7100

- · CE certified.
- · Large Color Touch Screen Display
- All function buttons are one touch away. Easy to use.
- · Measures FN conforming to international standards (ICC and AACC Standard methods).
- Single Analysis System
- Segregation of sound and sprouted grain to save money and ensure quality
- · Possibility to perform;
  - -Classical Falling Number Test in wheat flour and meal.
  - -Falling Number Test in wheat flour with Altitude Correction.
  - -Falling Number Test in meal of wheat, durum, rye and barley with Altitude Correction,
  - -Fungal Falling Number Test to detect alpha amylase enzyme activity which is added to flour
- · Automatic altitude correction and automatic recalculation of FN results
- · Moisture FN, Moisture GR, Mean Value, Liquefaction Number
- · Calculation of Blends, Sample ID
- LAN connection
- Print Out
- Archive

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- · CE certified.
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  - -Falling Number Test in meal of wheat, durum, rye and barley with Altitude Correction,
  - -Fungal Falling Number Test to detect alpha amylase enzyme activity which is added to flour

- Print Out Archive
- · Automatic altitude correction and automatic recalculation of FN results • Moisture FN, Moisture GR, Mean Value, Liquefaction Number · Calculation of Blends, Sample ID · LAN connection



## P R I S SCIENTEC RSA

## **MILLING**

#### **Shakematic FN7**

- Used for preparing homogenous samples for Falling Number Test.
- · Automatic shaking.
- Reduces operator influence on results.
- Reduces total analysis time.



#### **Cooling Unit CL 5**

- A Falling Number accessory.
- Reduces water consumption to practically zero and makes it possible to place FN units almost everywhere.
- Water re-circulation prevents water consumption and protects environment.



### Hammer Type Laboratory Mill HM 310

- CE certified
- A hammer type laboratory mill which is used for sample preparation for Gluten washing, Falling Number ,Protein and NIR applications.
- · Grinds grains, pellets, meals, spices, oilseeds, feeds and forages
- Reduced clogging by high performance motor
- Motor is inside the box, thus Low noise level.
- · Long lasting, durable,
- Cyclone outlet with filter bag to minimize dust
- Airflow feeder regulates feeding and facilitates grinding of large samples .
- Specific production for corn.
- Door switch provides safe operation
- Convenient and rapid sample preparation
- It provides possibility to grind samples up to 25% moisture content.
- 300 gr in 30-50 seconds depending on sample type and the moisture content.
- Standard sieve is 0.8 mm for Falling Number, Gluten washing system and NIR analyses. Other sieves are also available upon request. (0.5-1-2 mm)
- By selecting different sieves the particle size distribution in the sample can be varied.





#### CYCLONE HAMMER MILL.

Stainless steel grinding compartment with 3 bladed cross beaters pushing the ground product through an (interchangeable) 0, 8 mm sieve. The product is recovered through the cyclone into a 500 ml plastic jar. Dust free operation, low moisture loss.

Optional sieves available:

- 1, 2 mm Ø holes
- 1, 5 mm Ø holes
- 3 mm Ø holes.

Used for NIR - Falling number - Bran Content - Mixograph





#### Hammer Type Laboratory Mill HM 210

- CE certified
- A hammer type laboratory mill which is used for sample preparation for Gluten washing, Falling Number, Protein and NIR applications.
- Grinds grains, pellets, meals, spices, oilseeds, feeds and forages
- · Reduced clogging by high performance motor
- · Long lasting, durable,
- Cyclone outlet with filter bag to minimize dust
- Airflow feeder regulates feeding and facilitates grinding of large samples .
- Specific production for corn.
- Door switch provides safe operation
- Convenient and rapid sample preparation
- It provides possibility to grind samples up to 25% moisture content.
- 300 gr in 30-50 seconds depending on sample type and the moisture content.
- Standard sieve is 0.8 mm for Falling Number, Gluten washing system and NIR analyses.

Other sieves are also available upon request. (0.5-1-2 mm)

#### Roller Type Lab Mill RM 1300

- CE certified
- Rolls are to grind the wheat, a specially designed sieve to separate the standard flour and the bran.
- 2 different collectors stocking flour and the bran separately.
- Performs the test with the flour efficiency of %55-70 depending on the wheat variety and the moisture content.
- possibility to grind dampened wheat up to %16-17 moisture content.
- Possibility to see grinding by the glass front panel.
- Possibility to adjust the feeding rate according the moisture content or particle size of the wheat.
- 380 Volt 50 Hz. Electricity





#### <u>Friabilimeter</u>

Measuring instrument for malt friability Quick and easy evaluation of the brewing value of malt for breweries and malthouses.

Uncomplicated, mechanical analysis, Practical brewing value statement Simplification of the malt analysis. Robust and solid construction. Internationally recognized method (IM).

#### Usage area:

Brewers need high-quality malt for producing beer. The brewing value of the malt can be determined quickly and easily in practice using the Friabilimeter. In the malthouse, the Friabilimeter makes it possible to monitor the quality of the malt immediately after drying. Irregularities during the malting procedure are detected and corrected. The brewery can determine the quality of the malt upon delivery and then adjust the malt mixtures so that they are consistent.



#### Sedimentation Device ZL 120

- The system is use for determining gluten quality and hazardous damage.
- LCD display with 6 lines.
- 6 timers
- 40 rpm induced motor enables system to perform the test with standard 40 rpm rate, regardless of the load device
- Every timer has a led being active when it is operated.
- The device enables operator to run only the timer without operating the motor.
- It stops automatically warning with a signal.
- It operates the test with standard angle.
- Possibility to measure both sedimentation and modified sedimentation value.





#### Sieve Shaking Device Model S 200

- Adjustable timer 0-99 minute.
- · Polyamide frames ,durable, long lasting, easy replacement
- Possibility to check the sieving system in the mill and the production
- · Possibility to adjust the roll distances
- Possibility to use requested mesh sizes of sieves according to milling diagram
- Delivering 6 frames and 1 collecting container.
- Polyamide frames ,durable, long lasting, easy replacement
- Orbital movement, eccentric system.
- Digital control unit displays test time.
- Test ends warning with a beep signal.
- Start, Stop, Timer options.
- Frames are of 30 cm diameters.
- The collecting container can be mounted under any pulley to be able to research requested analysis.
- No need to fix the machine. It is not moving during test.



Sieving Apparatus Scientec RSA Orbital sieving, supplied with 4

wooden frames, lid + receiver. Supplied complete with electronic timer and adapter to hold 200 Ø round sieves.

Used for: Break release – Bran

Content - Granulation - Falling Number, etc.





#### **Dockage Sieve Shaker S310**

- Providing 1 test sieve frame and 1 collecting container followed.
- Frames have 20 cm diameter.
- The sieves are tightened by this part from one side and other side is tightened by a spring-like system.
- The sieving motion is horizontal.
- The amplitude of the motion stroke is between 25 and 35 cm.
- 0-60 seconds timer.
- Number of strokes are displayed on LCD Screen.
- Speed controlled/frequency adjustment.



#### **ELECTROMAGNETIC SIEVE SHAKERS**

TRIPLE MOTION SYSTEM

Precision Sieve Shaker is fitted with a very efficient clamping device that ensures sieves are held firmly without over-tightening and allows them to be quickly removed and replaced. Non-corrodible and non-metallic springs makes the shaker a maintenance-free device. The shaker is fitted with an electronic timer which can be preset to any duration up to 99 minutes. Sieve shaker has been specially designed to operate with heavy samples without loss of performance. It is equipped with a dynamic power source which ensures the right vibration is imparted to the sieves and sample for fast, accurate and reproducible tests.

Vertical movement is fixed to ensure the sample spends max. time on the sieve surface. The unique vibratory action also helps keep the apertures clear and free from binding.

**Technical Specifications** 

Sieve Capacity:

15 pieces of 200 mm (8") sieves + pan and cover 10 pieces of 300 mm (12") sieves + pan and cover

Dimensions: 830 x 930 x 1450 mm

Weight (approx.): 73 kg

Power supply: 220 V 1 ph 50/60 Hz ELECTROMAGNETIC SIEVE SHAKER

200 MM, 8 INCHES, 300 MM, 12 INCHES ANALOG / DIGITAL

**ELECTROMAGNETIC** 







FREQUENCY METER FOR SIEVE SHAKERS

### 200mm STAINLESS STEEL LABORATORY TEST SIEVES

#### Water Distillers SS 204

- Three different distilled water capacity: 4, 8 and 12 lt/hr.
- Stainless steel heaters.
- All surfaces in contact with water and steam made of stainless material.
- Electronic water level control in the boiling tank.
- Manometer for inlet water pressure.
- Magnetic water conditioner against calcification in boiling tank, condenser and in the lines where the water and steam are circulating.
- Safety system with warning light against low inlet water pressure, water interruption and empty boiling tank.
- · Warning led for heater failure.
- Wall mounted type not to occupy valuable laboratory benches.







#### Water Distillation (RSA)

All Glass 4 litres per hour –Water distillation unit 4 or 8 litre per hour, complete with low level Wall mounted, simple robust unit, with easy water cut out device, pressure regulator and exchangeable heating element. 20 litre storage tank which switches unit off when full.

#### Protein Analyzer P 110

DISTILLATION UNIT

- Stainless steel body
- The device is controlled by a programmable microprocessor
- With LCD display
- Waste dump will automatically start up after distillation
- Possibility to warn the user with warning messages
- Distillation time can be set between 0-49 minutes
- The amount of added alkali can be adjusted
- Possibility to work with 4 to 22 samples
- Complete with all accessories
- 1700 Watts team generator
- 220 V ,50 Hz.

#### **DIGESTION UNIT**

- Stainless steel body
- Possibility to work up to 24 samples
- Gas extraction system
- Adjustable temperature up to 450 C
- Test temperature is displayed digitally
- Combustion tubes are supplied together with the system





#### Furnace PLF 100/3

- $\bullet$  Temperature range is up to 1000 °C.
- 3 liters of inner volume
- Easy operation and double skin construction to maintain a cooler outer case.
- Low thermal mass insulation leads to a very impressive heat up rate as well as efficient insulation.
- Temperature control provided either by PID or Programmable controls depending on customer requirements.
- Chamber exhaust vent
- A vertical counter balanced door, keeps the hot insulation away from operator, while opening upwards.
- There is always a safety switch which isolates power when door is opened.





#### **Colour Grading Machine**

Testing the Colour of Flour Kent Jones type Wet method consisting of 50 ml of distilled water and 30 gr of flour

#### P3 Colour Grading Machine

Testing the Colour of Flour in a matter of seconds. Instant Kent Jones conversion. Kent Jones readout Dry method consisting of approx 20 gr of flour





- 1.Measure the color of wheat flour, bran star content, number of bran stars per unit area, maximum bran star area, blue light whiteness.
- 2.It meets the measurement requirements of the industry standard samples of wheat flour processing accuracy of the State Food Administration.
- 3.Meets the requirements of the standard "GB / T 27628-2011 Grain and Oil Inspection Wheat Powder Color and Bran Star".
- 4.Flour Color Show: Color space value L\*, a\*, b\* (L, a, b)
- 5.Bran star content: Ratio of bran star area on sample surface to sample surface area (%)
- 6.Whiteness:Blue light whiteness Wb
- 7.Display:10.5-inch high-resolution LCD display (can be connected to an external
- 8.Indication error:Whiteness≤0.5,Bran Star Percent≤0.4%
- 9.Repeat test accuracy: The absolute difference between two measurements of the same sample is less than 10% of the average, Chroma value  $\triangle E^*ab \le 0.2$
- 10.Preheat time: 30 min
- 11.Image sensor resolution greater than 1 million pixels
- 12.With embedded printer
- 13.Equipped with simulated bran star board and calibrated white board verified by national metrology institution
- 14.Can inquire data arbitrarily and generate Excel report
- 15. Continuous scanning, multi-point acquisition, analysis and real-time display of images on the computer, and save pictures
- 16.light source: Imitate D65 lighting
- 17.Equipped with USB and COM interface, can be connected to the host computer software
- 18. With scanner interface, can be connected to the scanner Grouped equipment:1 Master,1 set of Accessories,1 set of computer,1 Scanner, 2 calibration
  - whiteboards certified by the National Metrology Organization



## P R I S SCIENTEC RSA

### **MILLING**

#### Electronic Alveograph

Mix flour with a certain amount of salt water to make dough, supplant it to patch, fermentation in the thermostatic chamber.

Under a certain pressure and flow rate of air, the patch is blown into a very thin bubble, until it breaks.

Alveograph records the bubble curve of the internal pressure change of the bubble during the entire bubble blowing process, Obtain dough performance indicators such as dough toughness, ductility, and baking power.

#### Application field

Warehousing industry Uses Alveograph standards to ensure quality and wheat trade safety.

Monitor wheat quality during the acquisition process.

Grading wheat according to wheat use.

Screening for worms

Baking industry uses the Alveograph to Monitor the consistency of flour

Test new formulas.

Control additive dosage

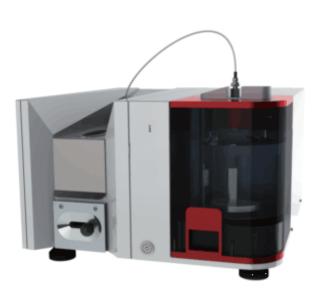
#### Flour industry

Optimized with wheat and flour According to the use of flour, accurately measure the optimum additive and the most suitable amount Main features and advantages

- 1.System cooling: Built-in electric refrigeration, no external water-cooling system required.
- 2.Dough with water: Automatic precise water addition, Automatic and precise control of water temperature Improver guidance Helps users choose the most suitable additive, get the target bubble value.
- 3. Virtual storage flour: Simulate each product into a granary and enter its corresponding price.
- 4. Four Matching: Automatically selects the proportion of up to 5 products, Reach the target bubble value
- 5. Traceability: monitor and analyze the product quality of a supplier or customer over a period
- 6.Patch bubble: Patch automatic positioning, automatic blowing, measuring chamber temperature and humidity automatic control, Blowing down, More round bubbles, Closer to the optimal experimental state
- 7.Experimental method: New detection parameters: Pressure/tension, First Derivative, Automatic calculation display, "Baking force attenuation", "relaxation", "Comprehensive" (Combination of different experimental methods, such as "Standard bubble"+"relaxation"). The experiment has been preloaded into the software, Users can set their own experimental methods. Such as Change kneading flour strength and time.so Alveograph can predict more and analyze the performance what we want to know.
- 8.Meet multiple standards: The detection method meets the requirements of the standards GB/T14614.4, ISO5530-4, ICC121, AACC54-30.







#### **MixoLab**

MixoLab can not only analyze flour and all kinds of cereals and whole wheat flour, but also analyze dough samples obtained directly from the production line. The equipment is widely used: soft wheat, hard wheat, barley, rye, rice, corn, quinoa, cassava and so on.

Users can develop their own formulation of additives to evaluate the effects of additives (gluten, protease, emulsifier, lipase, cysteine and enzymes) and ingredients (salt and salt, sugar and lipid), as well as develop prediction models to evaluate the baking effect of flour-based food.

#### **APPLICATIONS**

Detection of wheat during grain harvest and identification of wheat phagocytosis by insects.

Optimize wheat flour blending, determine the optimum additives and optimum amount, and evaluate the effect of damaged starch.

Monitoring the consistency of stored flour.

Detecting the Rheological properties of flour rich in fiber and studying the formula of whole wheat flour.

Optimize the quality of gluten-free products.

#### Features and Advantages

- 1. Automatic setting of mixing bowl temperature, accurate and reliable.
- 2. Alloy material, strong and durable, easy to clean.
- 3. Faster disassembly and assembly of water tank, more convenient, easier to clean.
- 4. Automatic water filling, high efficiency, more accurate to fill water.
- 5. All working conditions can be calibrated, with higher detection accuracy and simple operation of analysis software.
- 6. Dough Temperature Resistance Index: A new indicator to evaluate dough temperature resistance.
- 7. New experimental protocols can be established, and the temperature and speed can be changed at the same time.
- 8. Powder blending function for theoretical prediction of mixing experimental curve.
- 9. Additive prediction function: Directly visualize the use effect of additives and the optimal number of additives.
- 10. Prediction function: which automatically calculates results such as predicting bread volume based on the test results.
- 11. Automatic testing water absorption of flour, less than 8 minutes Specification

#### Quick Viscometer.

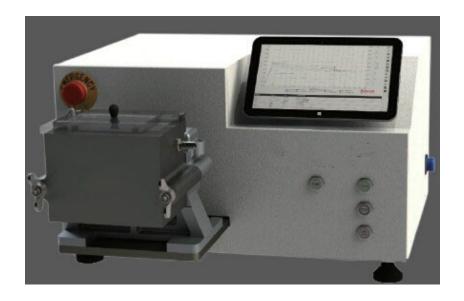
- 1.Power:220--230V, AC, 50/60Hz
- 2.Use environment:Temperature:10°C-30°C.Relative humidity:10-85%
- 3. Comply with LS / T6101-2002 test method
- 4.Use heating metal fast way to heat
- 5.Automatic analysis: maximum viscosity, attenuation, retention strength, regeneration value, final viscosity, stirring value, gelatinization temperature
- 6.Up to 128 test procedure steps can be designed
- 7. Sample quantity: 2-3g.
- 8.Temperature rising and falling speed: up to 14 °C/min
- 9.Temperature accuracy: no more than ±0.3°C
- 10.Temperature Control Range:0-99°C
- 11.range of rotation: Computer control,20~1000 rpm,adjustment
- 12.Speed accuracy:+/-1% (160 rpm)
- 13.Unit: CP, RVU
- 14.Viscosity range:40~12000 CP (80 rpm)
- 15. Viscosity Accuracy:+/-3% (S2000 oil, 5000 CP)
- 16.Instrument display screen: 4 lines x 20 digits

Grouped equipment:1 Master,1 box of consumables (200 sets) test tank and stirring blades,1 set of computer





#### **AUTOMATIC FARINOGRAPH**



- 1. This Model is automatic Farinograph Power: 220V, Motor Power: 300W
- 2.Main dough cutter speed:(63±1)r/min, Master-Slave Rubbing dough cutter speed ratio:(1.5±0.01):1
- 3.A torque sensor is used to detect the kneading process. The torque range:0~20Nm
- 4. Torque sensor detection accuracy is not less than 0.3%
- 5.Mixer Volume:300g
- 6. The high-quality imported stainless steel is used for the Mixer and kneader
- 7. And the Mixer has overload protection
- 8. Kneader has safety protection function
- 9.Measuring range:0~2000 Silty unit, Unit torque: (9.8±0.2) mN•m/FU
- 10. The water addition and operation process are prompted by the computer, and the data is automatically processed
- 11.Can compare the silty curves of different tests, Data encryption, You can open and compare the silty quality files of various brands of silty quality meters on the market. Thus having extremely strong compatibility, No limit on the number of branch files that can be opened simultaneously, And can customize the curve color and name.
- 12. Test results can be exported in data format for statistical analysis
- 13. The silty curve can be evaluated according to national standard methods and international standard methods
- 14.Using high-precision PID water bath to control the temperature, and the working temperature of the Mixer is 30  $\pm$  0.2  $^{\circ}$ C
- 15. The accuracy of adding water is 0.2ml (300g kneader)
- 16. The maxi pressure of the water bath is 340mbar, and the maximum flow rate is 15L / min
- 17. The instrument uses standard samples for detection, and the deviation of the stable time is within 15% of the standard value and the deviation of the stable time is within 15% of the standard value and the deviation of the stable time is within 15% of the standard value and the deviation of the stable time is within 15% of the standard value and the deviation of the stable time is within 15% of the standard value and the deviation of the standard value and the standard value a
- 18. The product has the evaluation report issued by the national quality inspection department
- 19. Can view silty data in real time on multiple terminals (need to cooperate with Smart box)
- 20.Software applicable system: Win7 / Win10 includes a set of use authorization, free upgrade for life
- 21. Strong compatibility, can load historical data of farinograph in other formats
- 22. You can interrupt the experiment and calculate the current result while the experiment is in progress
- 23.Real-time data real-time display
- 24. Selectable standard:
  - A. International Grain Chemistry Association Standard ICC 115/1
  - B. American Grain Chemistry Association Standard AACC 54-21
  - C. International Organization for Standardization ISO 5530-1
  - D. National Standard of the People's Republic of China GB / T 14614
- 25.Remind function whether the water volume meets the requirements
- 26.Intelligent zero, The results are more realistic and more accurate
- 27.Cycle mode: closed cycle
- 28.Temperature setting range of incubator: 20  $\sim$  50  $^{\circ}\text{C}$
- 29.Incubator temperature adjustment accuracy:±0.2°C
- 30.Incobator power:220V AC 50HZ 1200W
- 31.Maximum flow: 15L / min, one-button automatic water supply
- 32.Sink Size:335\*185\*410
- 33.Embedded software temperature control technology, precise, stable and uniform temperature control, Meantime increase the heating element detection technology, Real-time monitoring of heating elements
- 34.If there is any abnormality, the system will automatically alarm and prompt to make the whole machine more intelligent
- 35.Corrosion-resistant design, using imported steel and surface treatment Grouped equipment:1 Farinograph mater,1 1 set of computer, 1 set of Constant temperature water bath,2 Burettes,1 Data processing software and so on.



#### **EXTENSOGRAPH**

- 1.High-precision sensors and electronic systems are used to collect data at high speed, and the relationship between tensile force and tensile length is displayed in real time in the software, and the experimental results are presented more intuitively.
- 2. Closed arc shape, with functions of dustproof and heat preservation.
- 3. Testable flour properties:
- A. Stretching resistance (when stretching at 5 cm)
- B. Maximum tensile resistance
- C. Extensibility
- D. Stretch (area surrounded by energy graph)
- E. Stretching ratio (tensile resistance / elongation at 5 cm)
- F. Maximum draw ratio (maximum tensile resistance / elongation)
- 4.Overload protection function: when the data collected during the experiment exceeds the overload protection threshold of 1500 EU, it will immediately stop and alarm.
- 5. With 6 dough brackets, the brackets are not easy to stick flour after special treatment.
- 6. Rotating speed of rounder:  $(83 \pm 3) \text{ r / Min}$ :
- 7. Rubbing speed:  $(15 \pm 1) r / Min$ ;
- 8.Power:220V AC 50Hz 200W
- 9.Real-time display of proofing box time and temperature
- 10. The moving speed of the ramen hook is  $1.45 \pm 0.05$  cm / s, using synchronous belt drive
- 11. Unit tensile resistance (12.3  $\pm$  0.2) Nm / Eu;
- 12. Full computer prompt during the detection process, automatic data processing, easy operation
- 13. Evaluate the tensile curve according to the national standard method and obtain the evaluation result
- 14. Test results can be exported in data format for statistical analysis;
- 15. The proofing system adopts high-precision water bath temperature control, and the working temperature of the proofing box is 30 ± 0.2 °C;
- 16. The maximum pressure of the water bath is 340 mbar, and the maximum flow rate is 15 Lt / min;
- 17.Real-time viewing of stretch data on multiple terminals
- $18. The \ product \ has \ the \ evaluation \ report \ is sued \ by \ the \ national \ quality \ in spection \ department$
- 19. Applicable system: Win7 / Win10 includes a set of use authorization, free upgrade for life
- 20. Strong compatibility, can load historical data of extensometer in other formats
- 21. You can interrupt the experiment and calculate the current result while the experiment is in progress
- 22.Real-time data real-time display
- 23. Selectable standard:
- A. International Grain Chemistry Association Standard ICC 114/1
- B. American Grain Chemists Association Standard AACC 54-10.01
- C. International Organization for Standardization ISO 5530-2
- D. National Standard GB / T 14615
- 24. Comparison of multiple historical curves in the same view
- 25.Up to 20 graph curves can be displayed on the same chart at the same time, the result is more convenient, and the data trend and abnormal data can be quickly judged
- 26. The results of multiple historical experiments can be listed in a table and statistically analyzed to calculate the average and standard deviation of each physical quantity.
- 27.Real-time viewing of stretch data on multiple terminals (requires Smart Box)
- 28.Cycle mode: closed cycle
- 29.Temperature setting range: 20 ~ 50 °C
- 30.Temperature adjustment accuracy:  $\pm$  0.1 °C
- 31.Power: 220 V AC 50 HZ 1200 W
- 32.Maximum flow: 15 Lt / min
- 33.Sink Size:335\*185\*410
- 34. Using PID temperature control technology, high temperature control accuracy
- 35.Embedded software temperature control technology, temperature control is accurate, stable and uniform, At the same time increase the heating element detection technology to achieve real-time monitoring of heating elements.
- 36.If there is any abnormality, the system will automatically alarm and prompt to make the whole machine more intelligent.
- 37. Corrosion-resistant design, using imported steel and surface treatment;
- 38. The insulation layer of the proofing box is spliced and pasted by the insulation board
- 39. The kneading and forming component chassis is thick and stable, and the high resonance frequency is not easy to cause resonance
- 40. The rounding and forming components use a DC brushless worm motor, which has a small installation height, stable operation and low noise, which is convenient for precise speed control;
- 41. The stretching motor uses a DC brushless servo motor, a planetary gearbox, the motor runs smoothly and has low noise, precise speed control, and fast response.
- 42. The stretching part uses a synchronous belt linear module, which has high installation accuracy, low running noise, high standardization, beautiful appearance, and no need to apply grease Grouped equipment:1 set of Extensograph master,1 set of computer,1 set of Constant temperature water bath,1 set of Data processing software





#### Bread Volume meter (Fully Automatic)

- 1.Power:AC 220VAC, 50/60Hz
- 2.Use conditions:Temperature:5°C-40°C,Relative humidity:10-85%
- 3.10-60 seconds can quickly and easily detect the food volume, the conventional detection time is 20-30 seconds
- 4. Various accessories are available, almost all types of food can be analyzed
- 5.The laser probe is close to a full scan of 180 degrees, and the detection results are displayed in a table and a 3D map;
- 6.Can detect volume, length / height, width, depth, specific volume and weight 7.Simple verification and quick calibration
- 8.Non-contact non-destructive testing, suitable for testing various types of
- samples
  9.The maximum size of the tested sample (height x width x length): 45x33x33cm
- 9. The maximum size of the tested sample (neight x width x length): 45x33x33cm 10.Volumetric accuracy:0.5%(scanning time is 60s)
- 11. Weighing accuracy: <0,017%
- 12. Scanning data collection: up to 768 points / rev

Grouped equipment:1 host,1 set of Rectangular flat support frame,1 set of Round flat support,1 Two-point hook,1 set of Adjustment weight,1 set of computer.





#### **VARIOUS DRYING OVEN SIZES (RSA)**

Digital temperature setting and control "Scientec RSA" With forced convection fan and stainless steel racks.

Temperature adjustable from 5°C above ambient to 160°C Various sizes /Digital or Analogue Control / Electronically

#### <u>Automatic Adjustable Water Dispenser 5 – 60 ml</u>





**Analytical Balances** 

Capacity 80g to 250g Readability 0.0001g



### Solis Analytical and Semi-Micro Balances

Capacity 120g to 510g Readability 0.01mg/ 0.1mg to 0.0001g



#### **PMB Moisture Analyser**

Capacity 50g to 200g Readability 0.001g / 0.01% to 0.01g / 0.05%



#### **CB Compact Balances**

Capacity 500g to 3000g Readability 0.1g to 1g



### **Portable Compact Balances**

Capacity 200g to 5000g Readability 0.01g to 1g



#### **Solis Precision Balances**

Capacity 360g to 8200g Readability 0.001g to 0.01g



#### **Precision Balances**

Capacity 220g to 22000g Readability 0.001g to 0.1g



### **Portable Precision Balances**

Capacity 120g to 3000g Readability 0.001g to 0.1g





S.S. CALIBRATION WEIGHT
F CLASS



**DESK TYPE PH METER** 



<u>UNIVERSAL PH INDICATOR</u>

<u>PAPER</u>



<u>DIGITAL THERMO</u> <u>HYGROMETER</u>



S.S. CALIBRATION WEIGHT

E CLASS



**PORTABLE PH METER** 



**DIGITAL ANEMOMETER** 



**TACHOMETER** 



<u>CAST CALIBRATION WEIGHT</u> <u>M1 CLASS</u>



**POCKET TYPE PH METER** 



DIGITAL WEATHER
STATION







P R
I S
SCIENTEC-RSA

INFRARED THERMOMETER



S.S. PROBE DIGITAL
THERMOMETER



<u>BIMETALLIC</u> <u>THERMOMETER</u>



MAXIMUM MINIMUM
THERMOMETER



**ASTM THERMOMETERS** 



**GLASS THERMOMETERS** 



**DIGITAL CHRONOMETER** 



**DIGITAL DIAL GAUGE** 



<u>DIGITAL VERNIER</u> <u>CALIPER, STAINLESS S.</u>



**DESICCATOR CABINET** 



**VACUUM DESICCATOR** 



**NON VACUUM DESICCATOR** 



## P R I S

## **MILLING**

VACUUM FILTER FLASK





**GLASS BOILING FLASK** 



GLASS FUNNEL PYCNOMETER



**GLASS PYCNOMETER** 



**REAGENT BOTTLE** 



GLASS MEASURING
CYLINDERS



PVC MEASURING
CYLINDERS



GLASS BEAKER



**PLASTIC BEAKER** 



PLASTIC VOLUMETRIC FLASK



GLASS VOLUMETRIC FLASK

