Rapid Visco Analyser

RVA – TecMaster

Starch

Extruded Foods

Formulated Foods

Finished Products

Measure Performance of Ingredients and Finished Products

Perten INSTRUMENTS

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Rapid Visco Analyser RVA-TecMaster

The Rapid Visco Analyser (RVA) is a cooking stirring viscometer with ramped temperature and variable shear profiles optimized for testing the viscous properties of starch, grain, flour and foods. The instrument will analyze as little as two or three grams of sample using international standard methods or your own tailor-made profiles of mixing, measuring, heating and cooling. The RVA is the most effective instrument available today, designed from the ground up to make viscometric data acquisition simple. The RVA-TecMaster uses a PC with Thermocline for Windows (TCW3) software for operation and data management or load up to four profiles in the instrument for stand alone operation. An optional bar code scanner streamlines sample information entry. Combining speed, precision, flexibility and automation, the RVA is a unique tool for product development, quality and process control and quality assurance.

Features & Benefits

Rapid Viscosity Profile: Standard starch pasting test in 13 minutes.
Easy to Use: Automated operation minimizes training and ensures reliability.
Robust: Suitable for factory floor through to analytical laboratory.
Traceable: Calibration check with traceable standards to satisfy ISO9000 and Quality System requirements.
Glass-free: Safe for food manufacturing areas.
Precise: Accurate stirring speeds, heating and cooling rates, ensures repeatable results between RVAs.
Standard: International standard methods approved by ICC, AACC International and others.
Relevant: Tailor test routines to emulate processing conditions in industry.
ER/ES Compliant: Electronic Registration/Electronic Signature compliant TCW3 can create traceable, non-tamperable results.

Applications

Suitable for research and development, product design, production, quality assurance, quality control, raw material testing, process design and process control.
Starch: "If you are serious about starch there is only the Rapid Visco Analyser". Standard 13 minute pasting test for native and modified starches.
Flour Milling & Baking: Starch quality, gluten quality, amylase activity, weather damage.
Grains, Tubers, Roots: Starch quality in wheat, corn, rice, sorghum, potato, tapioca, sweet potato, arrowroot, sago and other products.
Brewing: Malting barley, barley storage, kilned malt and brewing adjuncts.
Extruded Foods and Feeds: Degree of cook in snacks, breakfast cereals and animal and aquaculture feeds.
Protein Quality: Wheat gluten, skim milk powder, whey protein concentrate and soy protein.
Gums: Gelling and thickening profiles of hydrocolloids and formulations.
Dairy: Melt tests, soft dairy desserts, ice cream, yogurts.

Specifications

Languages: English or Chinese.
Input/Output: USB for PC, LIMS, USB drive, label printer, keyboard, barcode scanner.
Power Requirements: 240/115VAC, 3.5A, 50/60 Hz.
Dimensions (H x W x D), Net Weight: 320 x 254 x 398 mm, 18 kg.
Temperature Range: 0-99.9ºC.
Heating/Cooling Rate: Up to 14ºC/minute (infinitely variable).
Coolant Consumption: Water, 1 l/min at cooling, 100-250 kPa. Chilled coolant required for cooling below room temperature.
Speed Range: Computer controlled infinitely variable 0, 20-2000 rpm.
Viscosity Range: 40-16,000 cP at 80 rpm, 20-8,000 cP at 160 rpm.
Viscosity Accuracy: +/- 3% for S2000 Oil nom. 5000 cP.