



## Consistometer E



... where quality is measured.

# Consistometer E



The **Consistometer E** utilizes high precision torque cell technology to measure the viscosity of Newtonian and non-Newtonian materials. In the Food Industry the instrument is used to evaluate a wide range of materials for the laboratory, production and quality control. Its application can be used to measure apparent viscosity and perceived difference in the flow properties of fluids, pastes, slurries and semi-solids with particulates. It may be used to characterize the flow behavior of materials and to predict consistency, processing ability or stability. The Consistometer Model E offers a wide measurement range, from a few centipoises up to 700,000 centipoises. The unit offers a menu driven electronic keypad and display for ease of operation and observation of data. The robust, rugged design is well suited for the toughest production and/or laboratory environment.

Optional equipment, such as water circulators and other accessories will allow you to investigate your product at fixed or programmed temperature rates to mimic actual process temperatures and conditions.

## Principle

The Consistometer uses reaction torque for dynamic measurement. Reaction torque is developed by submersing a sensor element in a rotating sample vessel containing the test material and measuring the resultant torque expended by the material on the sensing device. The torque is measured in units of either Centimeter-grams (cm-g) or Brabender Units (BU). The measured torque, time and speed data can then be utilized to calculate the apparent viscosity and characterize the flow behavior of the test material.

The unit is designed to meet a broad range of viscosity testing requirements. The new Model E design improves measurement range and precision, reduces operator error and offers unbiased results. Its new quick disconnect sensors facilitate easy clean up and changing of the sensors. Temperature can be measured and displayed via an optional Pt100 temperature probe. The instrument controls and measures speed at fixed intervals or may be programmed to interpret shear dependent flow behaviors with the protocol design and data transfer option.

Whether you use our standard bowl or your own specific product can --- the Consistometer E was designed for complete flexibility and will provide apparent viscosity measurements at room temperature. The Consistometer has been a standard instrument in measuring thermal processing of cream styled corn, as well as baby food and chocolate for crystallization measurements.

## Technical Data

Accuracy:	0.2% fsd
Speed:*	78 RPM (fixed speed)
Digital Torque Display:	cm-g or BU
Digital Temperature Indication:	Optional (10°C to 150°C)
Dimensions:	14" x 15" x 30" (W x D x H)
Weight:	60 lbs
Power requirements:	120V, 60 Hz, Single Phase, 3 Amps

\* Optional Variable Speed (20 - 250 RPM)

## Best suited for applications / materials such as:

- Cream-Style Corn
- Ketchup and Tomato Juice
- Baby Food
- Chocolate Crystallization
- Puddings, Custards and Pie Fillings
- Dough Batter
- Other Food Systems



## Interchangeable Sensors and Accessories

Catalog #03-30-037	Paddle "A" (2" D x 1.4" W)
Catalog #03-30-038	Paddle "B" (2" D x 1" W)
Catalog #03-30-039	Paddle "C" (1.5" D x 1" W)
Catalog #03-30-040	Paddle "D" (2" D x 0.75" W)
Catalog #03-30-001	Measuring Cup
Catalog #03-33-004	Temperature Probe
Catalog #03-33-010	Calibration Kit
Catalog #	Custom Shipping and Storage Case
Catalog #	Protocol Design & Data Transfer Option

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