# YR-1 Yield Stress Rheometer

a low-cost QC tool to enhance material characterization

#### **Displayed Information:**

- -Yield Stress Value (Pascal)
- -% Torque

EZ-Yield Software included for use with a PC

Temperature Probe included (not shown)

Vane Spindle Geometry works with thin to highly viscous materials (Does not disturb sample during spindle insertion)

Choice of Spindle Sizes to fit any sample container



User-friendly Keypad and display for stand-alone operation

Ideal for QC

Simple to use

Excellent repeatability

Affordable



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### What's Included?

Instrument V-72 & V-73 Vane Spindles ▼ EZ-Yield Software Carrying Case

### **Optional Accessories**

**RTD Temperature Probe** V-71, V-74 & V-75 Vane Spindles **Viscosity Standards** Temperature Bath

### **Applications**

1/4 RV SERIES — VERY LOW YIELD

Juices **Beverages** 

**RV SERIES — LOW YIELD** 

**Food Products** Shampoo Gels Yogurt

Hair Gels

#### **HB SERIES — MEDIUM YIELD**

Chocolate Lotions **Food Products** Ketchup

Hand Cream **Personal Care Products** 

Jelly **Toothpaste** 

#### 5xHB SERIES — **HIGH YIELD**

Adhesive Caulk Pastes Cheese Spread **Peanut Butter Fruit Preserves** Shortening



# YR-1 Vane Spindles

V-72 and V-73 vane spindles with case are supplied with YR-1.

V-71 (large), V-74 (small) and V-75 (small) vane spindles are optional.



#### **Brookfield Engineering Laboratories, Inc.**

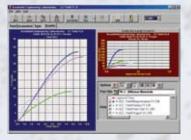
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### EZ-Yield Software Included

### Easily program and capture data

EZ-Yield software is included with all YR-1 Yield Stress Rheometers and allows for simple data collection on a PC. Collecting data affords you a record of all your valuable testing results.





**EZ-Yield Data Collection** 

**EZ-Yield Test Plots** for Multiple Samples

EZ-Yield software features a simple parameter menu for set up of 10 different test programs. Test parameters include: test number and name, spindle #, immersion mark, pre-shear (rpm), wait time before test startup, run speed (rpm), and low & high yield control limits (Pa) for QC use.

Streaming data can be viewed and test data — torque vs. time, stress vs. strain — is displayed in both tabular and graphical formats on a PC when using EZ-Yield software.

## **Vane Spindle Ranges**

SPINDLE	TORQUE RANGE	SHEAR STRESS RANGE (Pa)
V-71	1/4RV	.125-1.25
V-72	1/4RV	.5-5
V-73	1/4RV	2.5-25
V-74	1/4RV	25-250
V-75	1/4RV	10-100
V-71	RV	.5-5
V-72	RV	2-20
V-73	RV	10-100
V-74	RV	100-1K
V-75	RV	40-400
V-71	HA	1-10
V-72	HA	4-40
V-73	HA	20-200
V-74	HA	200-2K
V-75	HA	80-800
V-71	HB	4-40
V-72	HB	16-160
V-73	HB	80-800
V-74	HB	800-8K
V-75	HB	320-3.2K

- 1. 1 Pa = 10 dvne/cm2
- 2. Viscosity Range is given at rotational speed of 10 RPM
- 3. 5xHB is the highest torque range available 4. Not for use with DV-E Viscometers
- M = 1 million K = 1 thousand Pa = Pascal
- cP = Centipoise mPa•s = Millipascal/seconds