

# CAP 2000+

Cone & Plate Viscometer Appropriate for Moderate to High Shear Tests

## What's Included?

- Instrument
- Choice of Torque Range:
  - High Torque (ICI Specification): 181,000 dyne • cm
  - Low Torque: 7,970 dyne • cm
- Choice of Temperature Control: L or H

## Optional Accessories

- CAP Viscosity Standards
- Additional Cone Spindle
- Capcalc Software
- Protective Keypad Covers

Variable speed 5-1000 rpm instrument ideal for R&D as well as more detailed QC testing. Automated PC control (using optional Capcalc software).



MODEL SELECTION: CAP 2000+ Viscometer				
VISCOSITY RANGE			SPEEDS	
MODEL	Min.	Max.	RPM	Number of Increments
CAP 2000+	See next page		5-1000	995

## Features

**Keypad** for direct input of test parameters

**Cone Spindle** is easily removed for cleaning

**Easy-to-Use Control Handle** for accurate, automatic cone positioning

Designed to handle repetitive testing in production environments with easy setup and cleaning

4-Line Display allows simultaneous viewing of all test parameters

Automatic cone/gap positioning  
 Small sample size less than 1 mL

Built-in Peltier Plate for temperature control of sample:  
 L Series: 5°C – 75°C  
 H Series: 50°C – 235°C

# CAP 2000+ Cone & Plate Viscometer

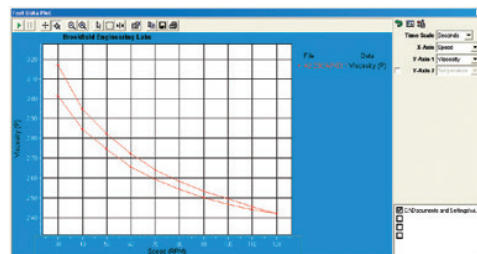
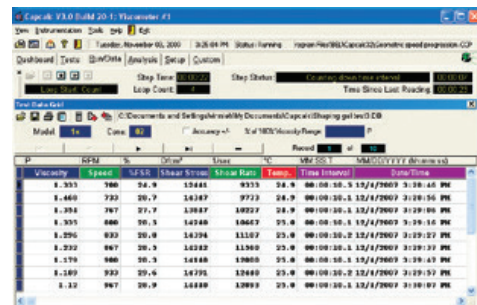
## Capcalc Software (Optional)

### Turn Your CAP 2000+ Viscometer Into a More Powerful Rheometer

Capcalc allows control of the CAP 2000+ Viscometer while providing automatic data capture and graphical display. Automate your CAP 2000+ Viscometer and generate flow curves quickly and easily.

### Other features include:

- Controls test parameters with powerful scripting capabilities
- Looping functions for repetitive tasks
- Automates data collection to save time
- Reduces operator error
- Math modeling for yield stress calculations, plastic index
- Plot up to four data sets for comparisons



## Applications

### Medium Viscosity

Adhesives (hot melt)	Industrial
Architectural Coatings	Coatings
Autocoats	Paints
(Hi-performance)	Paper Coatings
Creams	Plastisols
Food Products	Resins
Gels	Starches
Gums	Surface
Coatings	UV Coatings
Inks (screen printing)	Varnish
Organisols	

### High Viscosity

Adhesives	Molasses
Asphalt	Pastes
Compound	Roofing
Chocolate	Compounds
Composite Polymers	Sealants
Epoxies	Sheet Molding
Gels	Tars
Inks (ballpoint, offset, lithographic)	Vinyl Esters

## CAP Cone Viscosity Ranges (Poise)

Shear Rate (sec <sup>-1</sup> ): Sample Volume (μL) : Cone Spindle:	13.3N 67μL CAP-01	13.3N 38μL CAP-02	13.3N 24μL CAP-03	3.3N 134μL CAP-04	3.3N 67μL CAP-05	3.3N 30μL CAP-06	2.0N 1700μL CAP-07	2.0N 400μL CAP-08	2.0N 100μL CAP-09	5.0N 170μL CAP10
<b>MODEL HIGH TORQUE</b>										
1000+ @750 rpm	.25-2.5	.5-5	1-10	2-20	4-40	10-100	N/A	.N/A	N/A	N/A
1000+ @900 rpm	.2-2	.4-4	.8-8	1-16	3-33	8-83	N/A	N/A	N/A	N/A
1000+ @400 rpm†	.375-4.6	.75-9.3	1.5-18.7	3-37.5	6-75	15-187	.78-7.81*	3.13-31.3*	12.5-125*	1-10*
2000+ @5-1000 rpm	.2-375	.4-750	.8-1.5K	1-3K	3-6K	8-15K	.78-625*	3.13-2.5K*	12.5-10K*	1-1K*
<b>LOW TORQUE</b> (for applications requiring low shear rates for low/medium viscosity fluids, an optional low torque 797-7,970 dyne-cm instrument can be ordered)										
1000+ @100 rpm†	.2-.81	.2-1.6	.33-3.3	.65-6.5	1.3-13	3.3-33	.13-1.3	.54-5.4	2.2-22	.22-2.2
2000+ @5-1000 rpm	.2-16	.2-32	.2-66	.2-130	.2-260	.2-660	.2-26	.2-108	.2-440	.2-44

μL = microLiter N = rpm k = 1000 e.g. Cone CAP-01 13.3 x 10 (rpm) = 133 sec<sup>-1</sup>

\* Maximum speed recommended with this spindle is 400 rpm. Viscosity range indicated is for operation at 400 rpm.

Note: Viscosity ranges shown are for illustration; the exact range will depend upon instrument configuration for †Special speed instrument.

