

# 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

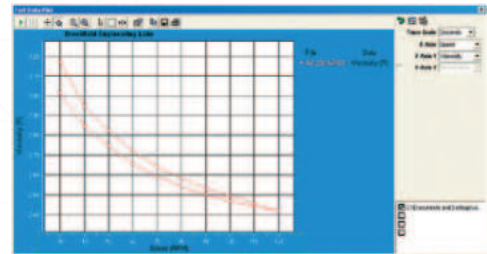
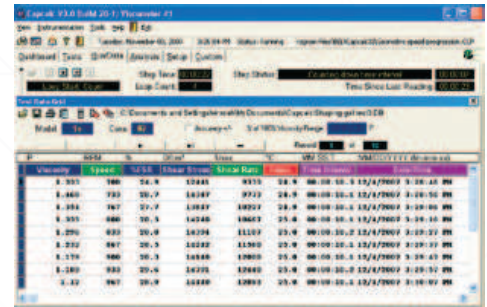
## Capcalc Software (Optional)

### 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		High Viscosity	
Adhesives (hot melt)	Industrial	Adhesives	Molasses
Architectural Coatings	Coatings	Asphalt	Pastes
Autocoats	Paints	Compound	Roofing
(Hi-performance)	Paper Coatings	Chocolate	Compounds
Creams	Plastisols	Composite Polymers	Sealants
Food Products	Resins	Epoxies	Sheet Molding
Gels	Starches	Gels	Tars
Gums	Surface	Inks (ballpoint, offset,	Vinyl Esters
Coatings	UV Coatings	lithographic)	
Inks (screen printing)	Varnish		
Organisols			

CAP Cone Viscosity Ranges (Poise)										
Shear Rate (sec <sup>-1</sup> ):	13.3N	13.3N	13.3N	3.3N	3.3N	3.3N	2.0N	2.0N	2.0N	5.0N
Sample Volume (µL) :	67µL	38µL	24µL	134µL	67µL	30µL	1700µL	400µL	100µL	170µL
Cone Spindle:	CAP-01	CAP-02	CAP-03	CAP-04	CAP-05	CAP-06	CAP-07	CAP-08	CAP-09	CAP10
<b>MODEL HIGH TORQUE</b>										
1000+ @750rpm	.25-2.5	.5-5	1-10	2-20	4-40	10-100	N/A	.N/A	N/A	N/A
1000+ @900rpm	.2-2	.4-4	.8-8	1-16	3-33	8-83	N/A	N/A	N/A	N/A
1000+ @400rpm†	.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+ @5-1000rpm	.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+ @100rpm†	.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+ @5-1000rpm	.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.

