

# CAP1000+ and 2000+ Series

...Cone & Plate Viscometers



Small sample size  
(less than 1 mL)

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

Choice of instruments:  
CAP1000+ (single speed)  
CAP2000+ (variable speed)

Automatic cone/gap positioning

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

VISCOSITY  
RANGE\*  
cP(mPa·s)

SPEEDS

MODEL	Min.	Max.	RPM	Number of Increments
CAP 1000+	see chart on		900/750	2
CAP 2000+	(p15)		5-1K	995

\* Dependant on cone selected.

M = 1 million K = 1 thousand cP = Centipoise mPa·s = Millipascal/seconds

## BROOKFIELD VISCOMETERS

# What's Included?

Instrument

Choice of Torque Range:

- High Torque (ICI Specification): 181,000 dyne • cm
- Low Torque: 7,970 dyne • cm

Choice of One Cone Spindle

Choice of Temperature Control: L or H

# Optional Accessories

CAP Viscosity Standards

Additional Cone Spindle

Capcalc32 Software ▶

**CAP1000+:** Single speed 750 or 900 rpm instrument, ideal for QC. Optional choice of alternative speed is available upon request. See examples below at 400 rpm and 100 rpm.

**CAP2000+:** Variable speed 5-1000 rpm instrument ideal for R&D as well as more detailed QC testing. Automated PC control (using optional Capcalc32 software).



Perfect for Paints & Coatings

Meets Industry Standards:  
ASTM D4287, ISO 2884, BS 3900  
High Shear Rate Cone & Plate  
(10,000 sec-1)

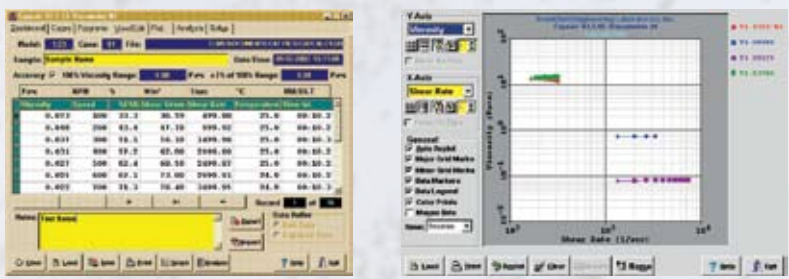


# Capcalc32 Software Optional

Turn your CAP2000+ Viscometer into a more powerful rheometer

Capcalc32 allows control of the CAP2000+ Viscometer while providing automatic data capture and graphical display. Automate your CAP 2000+ Viscometer and generate flow curves quickly and easily.

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



# CAP Cone Viscosity Ranges (Poise)

MODEL	Shear Rate (sec <sup>-1</sup> )	Sample Volume	Cone Spindle	Shear Rate (sec <sup>-1</sup> )	Sample Volume	Cone Spindle	Shear Rate (sec <sup>-1</sup> )	Sample Volume	Cone Spindle	Shear Rate (sec <sup>-1</sup> )	Sample Volume	Cone Spindle	Shear Rate (sec <sup>-1</sup> )	Sample Volume	Cone Spindle
<b>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	N/A	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	N/A	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 (for applications requiring low shear rates for low/medium viscosity fluids, an optional low torque 797-7,970 dyne-cm instrument can be ordered)</b>															
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	22-22					
2000+ @5-1000rpm	.2-16	.2-32	.2-66	.2-130	.2-260	.2-660	.2-26	.2-108	.2-440	.2-44					

mL = microLiter K = 1 thousand P = poise 1 Pa-s = 10 poise N = RPM e.g. Cone CAP-01 13.3 x 10 (rpm) = 133 sec-1  
 \*Maximum speed recommended with this spindle is 400 rpm. Viscosity range indicated is for operation at 400 rpm. †Special speed instrument.  
 Note: Viscosity ranges shown above are for illustration. The exact range will depend upon instrument configuration.

# Applications

## MEDIUM VISCOSITY

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

## HIGH VISCOSITY

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