

CAP 1000+ & CAP 2000+

Cone & Plate Viscometers



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)

Small sample size (less than 1 mL)

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

Keypad for direct input of test parameters

Cone Spindle is easily removed for cleaning

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 (p40)

Choice of Temperature Control: L or H

Optional Accessories

CAP Viscosity Standards (p45)

Additional Cone Spindle (p40)

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

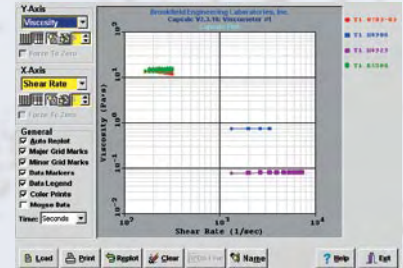
Meets Industry Standards:
ASTM D4287, ISO 2884, BS 3900
High Shear Rate Cone & Plate
(10,000 sec-1)

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
- Reduces operator error
- Math modeling for yield stress calculations, plastic index
- Plot up to five data sets for comparisons



Applications

MEDIUM VISCOSITY

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

CAP Cone Viscosity Ranges (Poise)

MODEL	Shear Rate (sec ⁻¹)	Sample Volume	Cone Spindle	Shear Rate (sec ⁻¹)	Sample Volume	Cone Spindle	Shear Rate (sec ⁻¹)	Sample Volume	Cone Spindle
High Torque									
1000+ @750rpm	.25-2.5	.5-5	1-10	2-20	4-40	10-100	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
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*
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*
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)									
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
2000+ @5-1000rpm	.2-16	.2-32	.2-66	.2-130	.2-260	.2-660	.2-26	.2-108	.2-440

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.