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# **DVNext™ Cone/Plate** Rheometer

## **AMETEK Brookfield's latest Rheometer for** measuring small sample sizes



Optional Compliance to 21 CFR Part 11 in Stand-alone Mode



Optional Compliant Version Includes Ethernet and LIMS Connectivity



Quick Set-up with the New Viscosity Wizard and Digital Leveling



**Updated Gap Settings** 

## **Optional Accessories**

- RheocalcT Software
- Label Printer
- Barcode Scanner
- Viscosity Standards
- Temperature Bath
- Ball Bearing Suspension (Standard in high torque instruments)
- Embedded Temperature Probe in Sample Cup
- Luer and Purge Fittings
- Additional Cone Spindles
- Magnetic Coupling
- Protective Touchscreen Covers

Somigare v	iscosity Test (		
Unsav	ed Test		
Step 1 of 1 🕂	Torque 6.1%		
Spindle CP-42 (42)	Speed		
Set cone plate gap	20.0 RPM 🔰		
Temperature	End Condition		
Live 23.0 °C 3	00:00:07		
Multi Point	Sample ID 🕕		
00:00:01	Reports\Instructions 3		
QC Limits	0.0000 4		
	Density 0.0000 g/cm <sup>3</sup>		
	Insert Step		
Less			
Clear Sa	D		
Clear Sa	ve Run		

MODEL COMPARISON	Standard	Compliant	
Viscosity Wizard	Included	Included	
Digital Leveling	Included	Included	
<b>Automated Oscillation Test</b>	Included	Included	
Updated Gap Setting	Included	Included	
Magnetic Coupling System	Optional	Included	
Barcode Scanning*	Optional	Included	
<b>Ethernet Connectivity</b>	N/A	Included	
LIMS Connectivity	N/A	Included	
Compliance to 21 CFR Part 11	N/A	Included	



Sample Cup (CPA-44YZ)



Cone Spindles

<sup>\*</sup>Spindle recognition with barcode reader

## **DVNext Cone/Plate Rheometer**

The all-in-one instrument for measuring viscosity and yield stress with optional 21 CFR Part 11 and GAMP compliance.



#### Features •

7-inch Full-Color -Touch Screen Display

- Enhanced Controls
- Real-Time Graphing
- Supports Multiple Languages

#### Displayed Info:

- Viscosity (cP or mPa•s)
- Temperature (°C or °F)
- Shear Rate/Stress
- % Torque
- Speed/Spindle
- Step Program Status
- Math Model Calculations

#### **Viscosity Wizard**

Built-in match models for data analysis in stand-alone mode (e.g., Casson, Bingham, Power Law, Thix Index)

**Stand-alone Programming** 

Integrated Temperature Control

Connected to AMETEK
Brookfield TC series Baths and
AP/SD Controllers or AMETEK
Brookfield Thermosel System.

#### **RTD Temperature Probe**

Accuracy: ±1.0% of Range

Displayed with Test Data

Repeatability: ±0.2%

Analyze characteristics such as yield stress, flow curves (mixing, pumping, spraying), leveling, and recovery

USB PC Interface provides optional computer control and automatic data collection capability

**Digital Leveling** 

Internal Data Storage: 150 MB

**Date and Time Stamp File** 

#### **Built-In Options**

- Math Modeling
- Temperature Control
- Yield Tests
- Programmable QC Limits, Alarms, and End Conditions

#### **GAMP\***

### 21 CFR Part 11 Compliant\*

- Customizable User Access
- Electronic Signatures
- Uneditable PDFs
- Automated Archived Audit Trail

\*Only available in Compliant Versions

Viscosity Range* cP(mPa <sup>-</sup> s)								
Cone Spindle:  Sample Volume: Shear Rate (sec-1):  MODEL	CPA-40Z and CPM-40Z .5mL 7.5N	CPA-41Z and CPM-41Z 2.0mL 2.0N	CPA-42Z and CPM-42Z 1.0mL 3.84N	CPA-51Z and CPM-51Z .5mL 3.84N	CPA-52Z and CPM-52Z .5mL 2.0N	SPE RPM	Number of Increments	
DVNXLVCP	.1-3k	.5-11k	.2-6k	2-48k	3-92k	.01-250	2.6k	
DVNXRVCP	1-32k	5-122k	2-64k	20-512k	39-983k	01-250	2.6k	
DVNXHACP	2.6-65k	10-245k	5-128k	41-1M	78-2M	.01-250	2.6k	
DVNXHBCP	10.5-261k	39-982k	20-512k	163-4M	314-7.8M	.01-250	2.6k	

K = 1 thousand cP = Centipoise M = 1 million mPa•s = Millipascal•seconds mL = MilliLiter e.g.Spindle CPA-40Z 7.50 x 10(rpm) = 75.0 sec<sup>-1</sup>

\*Dependant upon cone selected.