

# VISCOMETER PETROLEUM EQUIPMENT



# VISCOMETER PETROLEUM EQUIPMENT

Viscosity of an oil is defined as its resistance to flow and Viscometer measures the flow. Monitoring viscosity is one of the most important components of any oil analysis program. Minute changes in viscosity at operating temperatures can be magnified to the extent that an oil is no longer able to provide adequate lubrication and efficiency in preventing friction between moving parts.

Used in Materials Science, Chemical Industries, Oil and Gas Industry, Petroleum Industry.  
Also known as Viscometer, Viscosity meter, Rheometer.

## PTL11-04 KINEMATIC VISCOMETER

4 working units, equipped with sliding drop-hammer. 360° complete transparent structure is convenient to observe. Operation table is fully made of aluminum, treatment with wire-drawing



### SPECIFICATIONS

Model	PTL11-04
Working unit	4 tubes
Temperature controlling method	Imported PID digital temperature controller
Temperature controlling accuracy	± 0.1 °C
Heating method	Electrical heating tube
Total power	2.5 KW
Power supply	AC220 V/ 50 Hz

## PTL12-02 LOW TEMPERATURE KINEMATIC VISCOMETER

2 working units, Dewar low temperature bath with lighting. Safety protection device can prevent over-low liquid level.



Product Image Coming Soon

## SPECIFICATIONS

Model	PTL12-02
Working units	2
Temperature controlling range	50 – 40 °C ± 0.1 °C
Refrigerated by	Shock absorption air compressor, Fluorine free
Safety	Device can prevent over-low liquid level

## PTL13-05 MINI ROTARY VISCOMETER

Automatic nonlinear curve temperature control, can be edited and drawn in real-time according to requirements. Calculate and print borderline pumping temperature of Gas barrier type and flow limited type; Equipped with newly developed defrost system.



## SPECIFICATIONS

Model	PTL13-05
Temperature range	- 5 °C – 40 °C ± 0.02 °C
Temperature control	Automatic nonlinear curve
Window operation system	XP, Win7
Optional accessory	Test components of ASTM D6896 and ASTM D6821

## PTL14-05 HIGH TEMPERATURE HIGH SHEAR VISCOMETER

Allow 24 hours continuous working for 365 days. Shear rate and test temperature can be set as per requirements. Automatically advise test pressure. Make Excel test report



## SPECIFICATIONS

Model	PTL14-05
Test units	5
Test samples	10 - 20 every hour
Calibration error of standard oil	Automatically calculated
Working Conditions	24 hours continuous working for 365 days
Shear rate and test temperature	Can be set as per requirements

## PTL15-01-A LOW TEMPERATURE BROOKFIELD VISCOMETER

One-click automatic lifting structure. Software can calibrate viscometer and analyze linear accuracy. Can test after 2 hours constant temperature with the efficiency almost increased 90%



## SPECIFICATIONS

Model	PTL15-01-A
Lifting method	One-click, Automatic
Operation method	Touch screen
Cooling	Peltier cooling can test after 2 hours constant temperature

## PTL16-01-E ENGLER VISCOMETER

The instrument is composed of tester and temperature controller. Desktop structure. Both of inner and outer crucible adopt stainless materials. Inner crucible has been specially processed. The smooth finish corresponds with the test requirements.



## SPECIFICATIONS

Model	PTL16-01-E
Temperature controlling method	Imported PID digital temperature controller
Temperature controlling accuracy	± 0.1 °C
Heating method	Electrical heating tube
Total power	3.5 KW
Working unit	5 tubes
Power supply	AC220 V/ 50 Hz

## PTL17-06 LOW TEMPERATURE KINEMATIC VISCOMETER

The temperature of the constant temperature bath is controlled by the temperature controller, and the refrigeration and heating parts compensate each other to achieve heat balance and maintain a certain accuracy in controlling the bath temperature. The instrument can install two samples for test at the same time. The constant temperature bath is equipped with a stirring motor to make the temperature in the whole constant temperature bath uniform.



## SPECIFICATIONS

Model	PTL17-06
Capillary viscometer tubes (Pinkevitch viscometer)	6 pieces in total and the diameters for each is 0.6, 0.8, 1.0, 1.2, 1.5, 2.0 mm.
Temperature range	- 65 °C~room temp
Temperature control accuracy	± 0.1 °C
Ambient temperature	15 °C~35 °C
Relative humidity	≤ 85 %
Heating device	Electric heater, power ≤ 600 W
Refrigeration unit	Double refrigeration compressors
Temperature sensor	RTD, Pt100
Constant temperature bath	stainless steel
Maximum power consumption	1700 W
Power supply	AC (220 ± 10%) V 50Hz
Dimension	530×460×870 mm

# PTL18-80 AUTOMATIC CAPILLARY VISCOMETER WASHER

It adopts micro-controller control technology, program control, automatic washing. It needs less solvent oil and it is convenient, efficient. It can be widely used in the enterprises producing and using petroleum products, colleges and universities, and scientific research institutes and so on, where capillary viscometer are used. High degree automation.



## SPECIFICATIONS

Model	PTL18-80
Water bath temperature control range	Ambient to 80 °C
Ambient temperature	15 °C ~ 35 °C
Relative humidity	≤ 85 %
Maximum power consumption	700 W
Power supply	AC (220 ± 10%) V, 50 Hz
Dimension	320×300×500 mm (excluding the aspirator )
Net weight	24kg (excluding the aspirator)

# PTL19-15-M CCS MACHINE (MANUAL SAMPLING)

Automatically calculate calibration error of standard oil. Viscosity measuring range:1500-25000cp. Check the accuracy of data for users. Can edit dozens of standard oil.



## SPECIFICATIONS

Model	PTL19-15-M
Test temperature(°C)	-5,-10 -15,-20,-25,-30,-35
Temperature controlling range	Can reach to ±0.02°C
Viscosity measuring range	1500-25000cp
Cooling system	Peltier cooling system,can measure any temperature rapidly
Calibration	Automatically calculate calibration error of standard oil
Rotor	Upgraded rotor,low torque test status

System	Window operation system,XP,Win7
--------	---------------------------------

## PTL19-15-A CCS MACHINE (AUTOMATIC SAMPLING)

Automatically calculate calibration error of standard oil. Viscosity measuring range:1500-25000cp. Check the accuracy of data for users. Can edit dozens of standard oil. Test component of -40°C is optional.



### SPECIFICATIONS

Model	PTL19-15-A
Sample	12
Test temperature(°C)	-5,-10 -15,-20,-25,-30,-35
Temperature controlling range	Can reach to $\pm 0.02^{\circ}\text{C}$
Viscosity measuring range	1500-25000cp
Cooling system	Peltier cooling system,can measure any temperature rapidly
Calibration	Automatically calculate calibration error of standard oil
Rotor	Upgraded rotor,low torque test status
Sampling and washing	Automatic
Optional	Test component of -40°C

# LABSTAC

**Labstac LLC**

82 Wendell Avenue, STE 100, Pittsfield, MA, 01201, USA

Email: [contact@labstac.com](mailto:contact@labstac.com) | Website: [labstac.com](http://labstac.com)