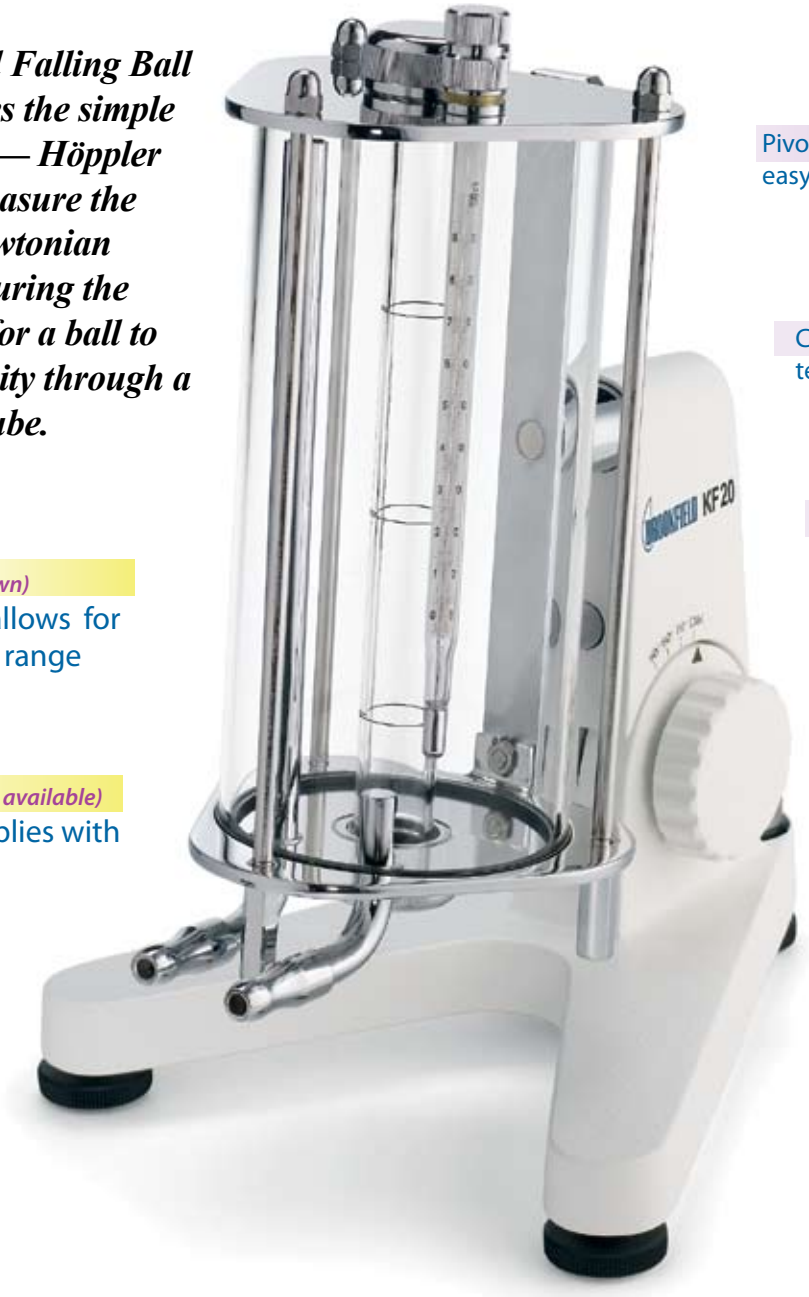
NEW Falling Ball Viscometer

...Newtonian measurements made simple and easy!

The Brookfield Falling Ball Viscometer uses the simple — but precise — Höppler principle to measure the viscosity of Newtonian liquid by measuring the time required for a ball to fall under gravity through a sample-filled tube.



Model KF20 ***(shown)***
variable angle allows for greater viscosity range

Model KF10 ***(also available)***
fixed angle complies with DIN 53015

Pivot bearing allows for quick and easy tube rotation for repeat test

Connection to circulating bath for temperature control of sample

Set of six balls to test a wide variety of samples

Accuracy: 0.5% to 2.0% (depending on ball used)

Temperature Probe

Viscosity Range:
0.5 to 70,000 mPa•s (cP)

BROOKFIELD VISCOMETERS

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T: 800.628.8139 or 508.946.6200 F: 508.946.6262 www.brookfieldengineering.com

What's Included?

Instrument
Set of six (6) balls
Temperature Probe
Carrying Case

Optional Accessories

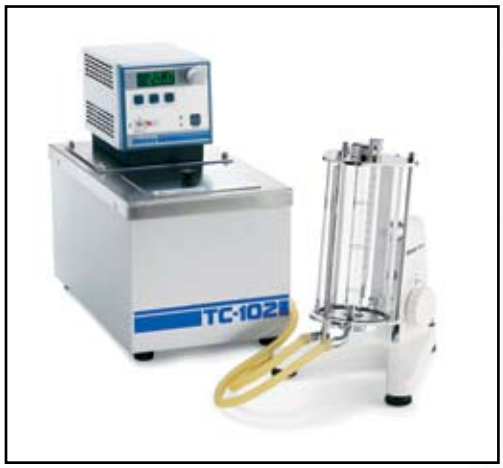
Circulating Temperature Bath

Viscosity Standard Fluids for Calibration

Special Temperature Probes

Applications

Beverages
Coatings
Cosmetics
Detergents
Food
Paint
Petroleum Products
Pharmaceuticals
Polymers
Soap



Use with a Brookfield Circulating Bath permits rapid temperature control of sample for more accurate and repeatable results.

How It Works:

The Falling Ball Viscometer is based on the measuring principle by Höppler for simple but precise dynamic viscosity measurement of transparent Newtonian fluids. The basic concept is to measure the elapsed time required for the ball to fall under gravity through a sample-filled tube inclined at an angle*. The tube is mounted on a pivot bearing which quickly allows rotation of the tube 180 degrees, thereby allowing a repeat test to run immediately. Three measurements are taken and the average time it takes for the ball to fall is the result. A conversion formula turns the time reading into a final viscosity value.

The Falling Ball Viscometer is used for quality control in various industries as well as in academic institutions to illustrate scientific method. The ease of use and straightforward method for recording time measuresments ensures meaningful test results.

*Model KF10 has a fixed angle of 80 degrees; Model KF20 can be angled at 50, 60, 70 and 80 degrees.

Ball Set with Case

The Falling Ball Viscometer comes complete with a set of six (6) balls. See Specifications for material construction.

SPECIFICATIONS

Viscosity Range:	0.5 mPa•s (cP) to 70,000 mPa•s (cP)
Accuracy:	0.5% - 2.0% depending on choice of ball
Ball set Material of Construction:	
	Balls 1 and 2: Boron Silicate Glass
	Balls 3 and 4: Nickel-iron
	Balls 5 and 6: Steel
Ball Diameter:	11.0 mm to 15.81 mm
Fall Time of Ball in Measurement:	30 to 300 seconds**
Length of Measurement Zone in the Tube:	100 mm
Operating Temperature Range:	-60°C to +150°C
Sample Tube Volume:	40mL
Viscometer Dimensions:	180 x 220 x 330 mm

**Falling times greater than 300 seconds allow measurement of liquids above 70,000 mPa•s (cP)

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