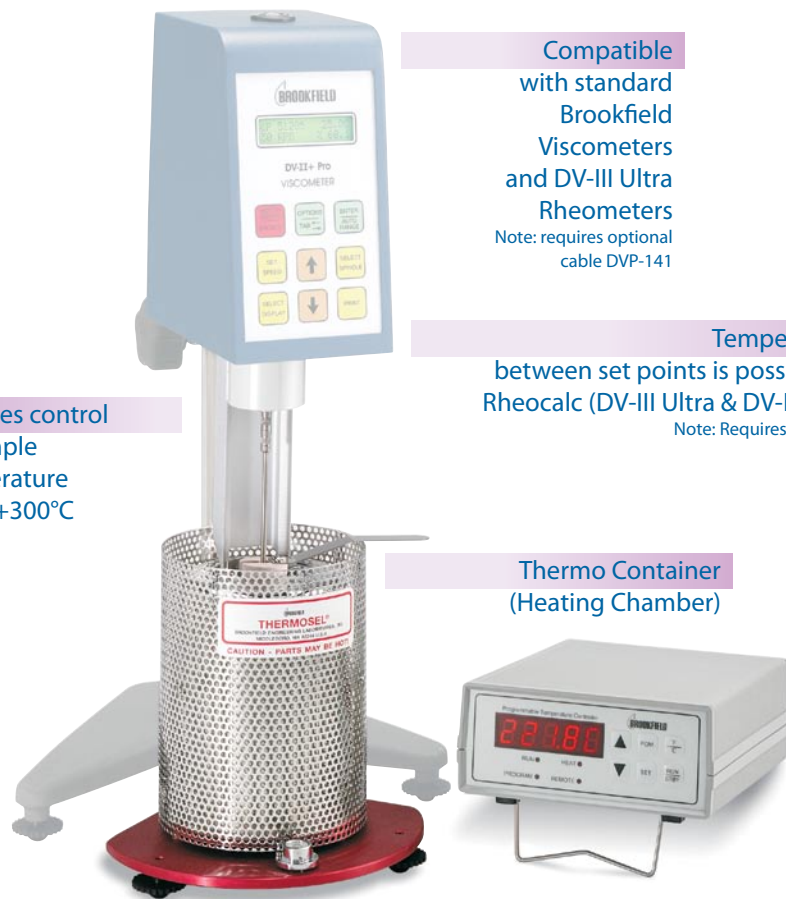


Thermosel™

for Elevated Temperature Testing



Compatible with standard Brookfield Viscometers and DV-III Ultra Rheometers
Note: requires optional cable DVP-141

Temperature Ramping between set points is possible if used with Rheocalc (DV-III Ultra & DV-II+Pro) Software
Note: Requires optional cable HT-106

Provides control of sample temperature up to +300°C

Thermo Container (Heating Chamber)

Programmable Temperature Controller offers single set point or up to 10 programmable set points.

The difficulty with viscosity measurements of hot melts and liquids at elevated temperatures has been in maintaining accurate temperature control that is consistent from sample to sample so that meaningful data could be obtained.

The Brookfield Thermosel solves this problem by providing a stable, precisely controlled sample environment. This, together with the inherent accuracy of the Brookfield Viscometers, is fundamental to the Thermosel System, which produces viscosity measurements that are not only accurate but entirely reproducible.

Several factors contribute to the stable environment:

Non-fluctuating temperature control

Small sample volume and insulated sample chamber which reduces temperature gradients within the sample

The rotating spindle, which acts as a built-in stirring device

The test procedure is quite straightforward. Once familiar with the system, unskilled operators can easily produce accurate, reproducible data.

What's Included?

Choice of one SC4 Spindle
Specify when ordering

Alignment Bracket

Thermo Container with safety guard and insulating cap

1 Removable Sample Chamber (p41)

5 Disposable Sample Chambers (p41)
Order additional chambers in quantities of 100, HT-2DB-100

Extracting Tools

Temperature Controller with an RTD probe

Applications

Hot Melts Asphalt
Wax Polymers

BROOKFIELD TEMPERATURE CONTROL

Additional Information



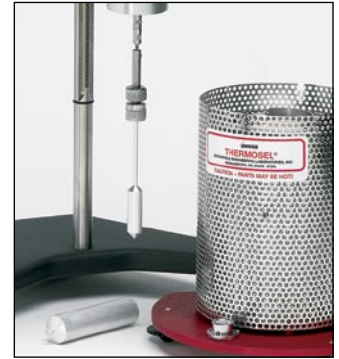
Alignment Bracket ensures concentricity of spindle and sample chamber.



Other components supplied include sample chamber holder, RTD probe, insulating cap, coupling link, coupling nut and choice of SC4 spindle.



Extracting Tool enables the sample chamber to be handled easily and safely.



Option: Disposable Sample Chamber with Optional Disposable Spindle SC4-27D* is ideal for asphalts or any difficult-to-clean material.

Order disposable SC4-27D spindle in quantities of 100, Part No. SC4-27D-100. Requires special chuck/closer, Part No. SC4-DSY, for attachment to viscometer. Order disposable HT-2DB chambers in quantities of 100, Part No. HT-2DB-100.

Thermosel Viscosity Ranges cP(mPa·s)

SPINDLE SAMPLE VOLUME SHEAR RATE (sec ⁻¹)†	SC4-18 8mL 1.32N	SC4-31 10mL .34N	SC4-34 9.5mL .28N	SC4-21 8mL .93N	SC4-27* 10.5mL .34N	SC4-28 11.5mL .28N	SC4-29 13mL .25N	HT-DIN-81** 7mL 1.29N
MODEL								
LVDV-IIIU	1.2-30K	12-300K	24-600K	Not applicable for historical reasons. However, it is possible				1.0-10K
LVDV-II+P	1.5-30K	15-300K	30-600K	to use the above spindles with any of these instruments.				3.4-10K
LVDV-I+	3-10K	30-100K	60-200K	Digital Viscometers/Rheometers will automatically calculate				3.4-10K
LVDVE	3-10K	30-100K	60-200K	viscosity. Please contact Brookfield or an authorized dealer				N/A
LVT	5-10K	50-100K	100-200K	if you require information on viscosity range.				5.7-10K
RVDV-IIIU				20-500K	100-2.5M	200-5M	400-10M	14.6-10K
RVDV-II+P				25-500K	125-2.5M	250-5M	500-10M	36.5-10K
RVDV-I+				50-170K	250-830K	500-1.7M	1K-3.3M	36.5-10K
RVDVE	Not applicable for historical reasons.			50-170K	250-830K	500-1.7M	1K-3.3M	N/A
RVT	However, it is possible to use the			50-100K	250-500K	500-1M	1K-2M	36.5-10K
HADV-IIIU	above spindles with any of these			40-1M	200-5M	400-10M	800-20M	29.2-10K
HADV-II+P	instruments. Digital			50-1M	250-5M	500-10M	1K-20M	73.0-10K
HADV-I+	Viscometers/Rheometers will			100-300K	500-1.7M	1K-3.3M	2K-6.7M	73.0-10K
HADVE	automatically calculate viscosity.			100-300K	500-1.7M	1K-3.3M	2K-6.7M	N/A
HAT	Please contact Brookfield or an			100-200K	500-1M	1K-2M	2K-4M	73.0-10K
HBDV-IIIU	authorized dealer if you require			160-4M	800-20M	1.6K-40M	3.2K-80M	116.8-10K
HBDV-II+P	information on viscosity range.			200-4M	1K-20M	2K-40M	4K-80M	292.0-10K
HBDV-I+				400-1.3M	2K-6.7M	4K-13.3M	8K-26.7M	292.0-10K
HBDVE				400-1.3M	2K-6.7M	4K-13.3M	8K-26.7M	N/A
HBT				400-800K	2K-4M	4K-8M	8K-16M	292.0-10K

M = 1 million K = 1 thousand N = RPM † Spindle SC4-18 1.32 x 10 (rpm) = 13.2 sec⁻¹ cP = Centipoise mPa·s = milliPascal-seconds

*Optional disposable SC4-27D spindle is available in quantities of 100, Part No. SC4-27D-100. Requires special chuck/closer, Part No. SC4-DSY, for attachment to viscometer.

**The 81 spindle, Part No. HT-DIN-81, works in an HT-2 or HT-2DB chamber.