



Anton Paar

::: Intelligence in Rheometry

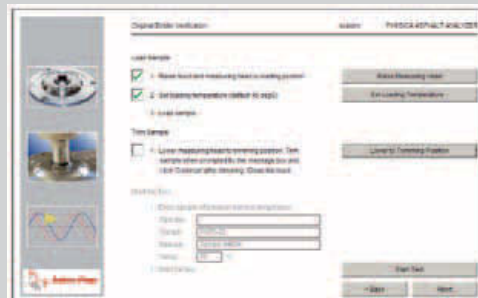


SmartPave

The SmartPave is a Dynamic Shear Rheometer (DSR) combined with a completely new and unique Peltier heating system. The SmartPave incorporates new and innovative features that take asphalt testing to previously unattained levels of accuracy, comfort and ease of use.

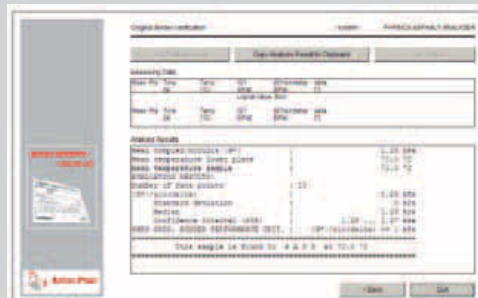
New, easy to use software

The completely new, user-friendly rheometer software has been designed specifically for the needs of the asphalt industry. All test procedures required for SHRP testing according to AASHTO T315 are easily accomplished. Other test procedures, like the strain sweep linearity test, are just a mouse click away.



Fully automatic temperature calibration

We have developed an automatic temperature calibration which makes the calibration as simple as can be. Load the calibration probe into the instrument and the temperature calibration will be done automatically by pressing a single button.



Fast Peltier heating and cooling

The new temperature control unit is the first Peltier heating system with heating elements above and below the sample. Temperature gradients are completely eliminated and the heating and cooling rates are unbelievably fast – typically 30 K/min compared to typically 1 K/min with a fluid circulator. Test times are reduced, almost cut in half, while reproducibility is improved. For example, it is very convenient to raise the temperature to 100 °C for cleaning. After the cleaning is completed, it only takes a few minutes to set the system back to filling temperature. In short, the combination of the new temperature calibration routine and the upper and lower Peltier temperature control system eliminates gradients while reducing test time and improving reproducibility!

No more water!

Due to the unique asphalt chamber, there is no water flow around the sample. You can work in a dry environment. Annoying noises and blocked filters are things of the past.

Guided operation

A fully automatic temperature setting routine guides the user through the grading process, making asphalt grading as easy as can be. Thanks to the versatility and modularity of the SmartPave rheometer, you can perform all tests used in modern rheology today. The broad torque range and true stress and strain capabilities allow you to adjust the measurements to match your special needs. That means you won't have to buy a new rheometer if the asphalt test specifications change in the future; your SmartPave will be able to handle the new demands and to protect your investments.



Specifications SmartPave

Maximum torque:	200 mNm
Minimum torque, oscillation:	10 nNm
Minimum torque, rotation:	50 nNm
Torque resolution:	0.5 nNm
Maximum angular velocity:	314 rad/s
Minimum angular velocity:	10^{-8} rad/s
Maximum angular frequency:	628 rad/s
Minimum angular frequency:	10^{-7} rad/s
Angular deflection, resolution:	10 nrad

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Instruments for:

Density & concentration measurement	Colloid science
Rheometry and viscometry	High-precision temperature measurement
Sample preparation	Refractometry
Microwave synthesis	Polarimetry
	X-ray structure analysis

Specifications subject to change without notice.

Your distributor: