Prescott instruments

RHEOLINE MOVING DIE RHEOMETERS

EXPLORE THE *RHEOLINE* MDR AND MINI MDR

The Rheoline Moving Die Rheometer (MDR), or rotorless curemeter, is the rheometer most closely associated with the rubber industry. Instead of a rotor, a top and bottom die form a sealed biconical cavity that contains the rubber sample. The lower die oscillates through a small angle while the sample is held at an elevated temperature. The two dies allow the MDR to separate the elastic and viscous components of the rubber compound and plot them as two individual curves.

The Rheoline Moving Die Rheometer is a stand-alone desktop instrument that is supplied with Labline, the flagship LIMS software suite from Prescott Instruments. An alternative model, the Rheoline Mini Moving Die Rheometer (MDR), is also available. Automation modules are compatible with both the Rheoline MDR and Rheoline Mini MDR, which permit the hands-free testing of up to 16 samples.

	Rheoline Moving Die Rheometer (MDR)	Rheoline Mini Moving Die Rheometer (MDR)
Die Assembly	Biconical Die; Sealed	Biconical Die; Sealed
Standards	ISO No. 6502 / ASTM D5289	ISO No. 6502 / ASTM D5289
Oscillation Angle	0.5 ° (Std.), 1.0 ° and 3.0 °	0.5 ° (Std.), 1.0 ° and 3.0 °
Frequency	1.67 Hz	1.67 Hz
Temperature Range	Ambient to 250 °C ± 0.03 °C	Ambient to 250 °C ± 0.03 °C
Torque Range	0.001 to 250 dNm	0.001 to 250 dNm
Test Methods & Channels	Standard Torque Curve Viscous Curve Tan. Delta Cure Rate Programmable Data Points & Limits Pass/Fail Limits	Standard Torque Curve Viscous Curve Tan. Delta Cure Rate Programmable Data Points & Limits Pass/Fail Limits
Weight	200 kg	56 kg
Dimensions	575 mm x 570 mm x 1280 mm (W x D x H)	300 mm x 300 mm x 690 mm (W x D x H)
Software	Labline	Labline
Test Specifications	Unlimited	Unlimited
Capacity	24/7 Operation	Light Use
Programmable Temperature Zones	Optional Upgrade	Optional Upgrade
Additional Oscillation Eccentric	Optional Upgrade	Not Available
Pressure Transducer	Optional Upgrade	Optional Upgrade
Automation Module (4/16 Samples)	Optional Upgrade	Optional Upgrade