

## EXPLORE THE *MOONEYLINE* MV AND MINI MV

The type of viscometer most used for rubber is the Mooney Viscometer, whereby a rotor rotates at 2 revolutions per minute (RPM) within a heated, closed cavity filled with uncured rubber. The rotor exerts a shearing force on the rubber, and the resultant torque is measured by a transducer.

The Mooney viscosity, otherwise known as the stiffness of the uncured rubber, is expressed in arbitrary Mooney Units (MU), which relate directly to the resultant torque. The larger the number of Mooney Units, the stiffer the rubber. A plot of Mooney Units against time is used to determine the Mooney viscosity, scorch time, stress relaxation and area under the curve.

Every instrument has been specifically designed to meet the needs of modern rubber testing laboratories, with ergonomic design features and advanced functionality. The Mooneyline Mooney Viscometer (MV) is a stand-alone desktop instrument that is supplied with Labline, the flagship LIMS software suite from Prescott Instruments. An alternative model, the Mooneyline Mini Mooney Viscometer (MV) is also available.



	Mooneyline Mooney Viscometer (MV)	Mooneyline Mini Mooney Viscometer (MV)
<b>Die Configuration</b>	Standard	Standard
<b>Standards</b>	ISO No. 289 / ASTM D1646	ISO No. 289 / ASTM D1646
<b>Rotor</b>	Large or Small	Large or Small
<b>Rotation Speed</b>	2 RPM (0.21 Radians/Sec)	2 RPM (0.21 Radians/Sec)
<b>Calibration</b>	Fully Automatic	Integral
<b>Temperature Range</b>	Ambient to 225 °C	Ambient to 225 °C
<b>Temperature Control</b>	3 Term PID – Control Accuracy $\pm 0.03$ °C	3 Term PID – Control Accuracy $\pm 0.03$ °C
<b>Pneumatics</b>	Filtered Air, Min: 0.41 MPa   60 psi   4.14 Bar   4.2 kg/cm	Filtered Air, Min: 0.41 MPa   60 psi   4.14 Bar   4.2 kg/cm
<b>Electrical</b>	Single Phase 220/240V 50Hz   110V 60Hz   350 VA	Single Phase 220/240 V 50 Hz   110 V 60 Hz   350 VA
<b>Weight</b>	200 kg	65 kg
<b>Dimensions</b>	575 mm x 570 mm x 1280 mm (W x D x H)	300 mm x 300 mm x 870 mm (W x D x H)
<b>Test Capabilities</b>	Mooney Torque Mooney Scorch Stress Relaxation Area Under the Curve	Mooney Torque Mooney Scorch
<b>Software</b>	Labline	Labline
<b>Test Points</b>	Unlimited	Unlimited
<b>Capacity</b>	24/7 Continuous Operation	Light Use
<b>Environment</b>	Production, Quality Control, Laboratory	R&D, Quality Control, Laboratory