## Productivity Reliability Repeatability Traceability

# **Viscosity**

# Wallace Wallace

# **Mooney Viscometer Mk III**

The Mooney Viscometer Mk III measures and records the viscosity of natural, synthetic or compounded rubber.

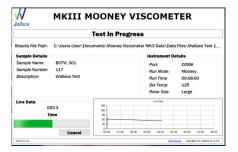
### **Features**

- Simple and robust mechanical system producing reliable results
- Precise digital temperature control
- All digital versions come PC enabled as standard
- Analogue model available on request

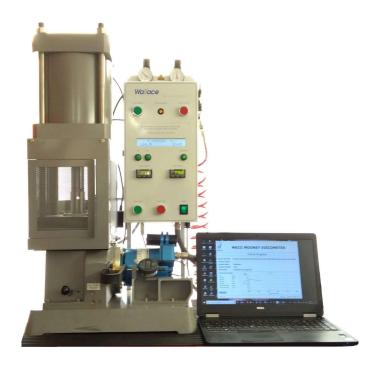
## **Principle of Operation**

Conforming to international standards, the Mk III is a shearing-disc viscometer in which the rubber sample is compressed pneumatically in a cylindrical chamber formed by cavities in 2 opposing dies.

The viscosity is determined by measuring the torque required to turn the rotor inside the chamber, which is heated to a set temperature. As the rotor shears the sample, a torque reaction is transmitted through a worm shaft, which deflects a torsion beam. A dial gauge (analogue or digital) measures the beam's displacement. With its simple mechanical drive system and well-proven design, the Mk III has been in use for many years and has become the workhorse for many laboratories.







## **Our Software**

- Allows you to follow test results live on screen
- Save all results for future reference
- Compare results on screen
- Print results with one click

#### **Accessories**

#### **Standard Accessories:**

- Large rotor
- Small rotor
- Tool set

#### **Optional Accessories:**

- V3/Cal calibration kit
- S6/15 Mooney sample cutter
- Software
- Printer





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# **Mooney Viscometer Mk III**

Analogue and digital models available - versions as specified below:

#### Analogue Model - WAV3/1

- Provides single reading of test result
- Uses digital temperature controllers

#### **Digital Model - Standard Version, WAV3/2**

• PC interface (RS 232)

#### **Digital Model - Printer Version, WAV3/3**

- Same specification as WAV3/2 plus
- Compact printer with high speed print capability
- 24 character column print output

## **Specifications**

Mooney Viscometer Mk III	
Part Number	WAV3/1, WAV3/2, WAV3/3
Dimensions (mm)	810 (h) x 510 (w) x 460 (d)
Weight	127 kg
LED screen, (excl. V3/1)	2 line, 20 character back-lit display housed in control panel
Controls	3 sealed switches with integral LED indicators
Die heating Temp. range	By elements to upper and lower platens. 700W per element 80 - 150°C (±0.1°C)
Max. torque	Cut out at 200 Mooney points
Die closure	Using Pneumatic cylinder
Air line pressure	80 psi or 5 bar maximum
Gauge, (excl. V3/1)	0.0 - 0.5"range. 0.0005"resolution.
Pressure controls	Twin controls for platen closure and test routine
Operating Temperature	10 to 40°C; Altitude 2000m maximum
Humidity Range	10 to 80% RH non-condensing
X20 Printer ( V3/3 Model only)	
Weight	500g + PSU 200g
Dimensions (mm)	95 (h) x 125 (w) x 195 (d)

## **Standards**

ASTM D1646, ISO 289-1



