# PPA 2000<sup>™</sup>

The world standard for measuring complex rubber properties in a production environment



#### **Features**

- n Measures dynamic properties of raw elastomers or mixed rubber.
- n Cure tests, sweep tests, stress relaxation tests.
- n Meets ASTM D5289, D6048, D6204, D6601, D7050, and D7605.
- n Reduces cost of the instrument by selecting only those test templates required for your process.
- n Sealed biconical dies.
- n Low friction reaction torque measurement.
- n Superb temperature stability and control with cooling.
- n Repeatable and reproducible data.
- n Enterprise Pathfinder software simplifies test set up and SPC of processes.
- n Standard five-sample queuing improves productivity.

## **Specifications**

FREQUENCY: 0.1 to 3000 cpm (0.0016 to 50 Hz)

TEMPERATURE RANGE: RT to 230°C

MAX RAMP RATE: 1 C/s
MAX COOL RATE: 0.5 C/s

STRAIN:  $\pm 0.3\%$  to  $\pm 1250\%$  ( $\pm 0.02$  to  $\pm 90$  degrees) MEASURED DATA: Torque, temperature, frequency, strain CALCULATED DATA:  $G', G'', G^*, S', S'', S^*, \tan \delta, \eta', \eta'', and \eta^*$ 

DATA STORAGE: SQL database

REPORTS AND EXPORT FILES: Numerous formats

INSTRUMENT LANGUAGES: English, French, Chinese, German, Italian,

Japanese, Portuguese, Russian, Spanish,

Slovak, Turkish

ELECTRICAL:  $\cdot 100/110/120/130 \text{ VAC} \pm 10\%, 60 \pm 3 \text{ Hz},$ 

10-amp single phase

• 200/220/240/260 VAC ±10%, 50 ±3 Hz,

5-amp single phase

AIR PRESSURE: 80 psi (5.6 kg/cm<sup>2</sup>, 551 kPa) minimum

DIMENSIONS: Width 68 cm (27 in), height 132 cm (52 in),

depth 76 cm (30 in)

WEIGHT: Net 177 kg (389 lb), gross 280 kg (616 lb)



PPA 2000



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### PPA 2000<sup>™</sup>

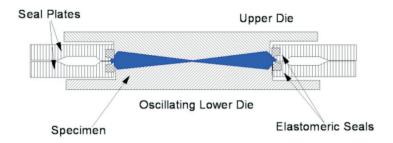
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#### **Performance**

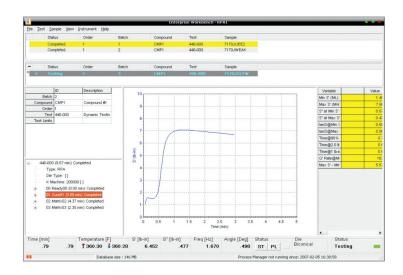
- n Measure dynamic properties of rubber before cure, during cure or post-cure.
- n Characterize raw polymers.
- n Excellent test sensitivity to mixing errors or compound changes.
- n Limited operator influence.
- n Excellent repeatability.
- n Suitable for quality control.
- n Can eliminate or reduce physical property testing.

### **Options**

- n Purchase only those test templates required for your production needs.
- n Pressure measurement.
- n Sample cutter Model 2000R for rubber.
- n Film combinations to handle various sample types.



Die configuration of PPA 2000



PPA test displayed by the Enterprise software system

