RPA 2000™
Rubber Process Analyzer

Measures dynamic properties of raw elastomers or mixed rubber before cure, during cure or post-cure – cure tests, sweep tests, stress relaxation tests.
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Testing Features

- Measures dynamic properties of raw elastomers or mixed rubber
- Cure tests, sweep tests, stress relaxation tests
- Sealed biconical dies
- Low friction reaction torque measurement
- Superb temperature stability and control with cooling
- Repeatable and reproducible data
- Enterprise Pathfinder software simplifies test setup and SPC control of processes
- System can be automated to test up to 100 samples

Performance

- Measure dynamic properties of rubber before cure, during cure or post-cure
- Characterize raw polymers
- Excellent test sensitivity to mixing errors or compound changes
- Limited operator influence
- Excellent repeatability
- Suitable for quality control or research and development
- Used as a world standard by many international organizations

Options

- Automation (10 or 100 samples)
- Pressure transducer
- Extended Dynamic Range (EDR) for improved torque sensitivity
- Large Amplitude Oscillatory Shear (LAOS) for measurement of Long Chain Branching (LCB)
- PRPA2000™ model with production cabinet and 5-sample queuing
- Sample cutter Model 2000R for rubber
- Wide Assortment of films for different applications
- Interface to Eclipse software system for handling historical data

Specifications

- Frequency: 0.1 to 3000 cpm (0.0016 to 50 Hz)
- Temperature Range: Ambient to 230°C
- Max Ramp Rate: 1°C/s
- Max Cool Rate: 0.5°C/s
- Strain: ±0.07% to ±1255% (±0.005 to ±90 degrees)
- Calculated Data: G', G'', S', S, tanδ, G*, G''
- Data Storage: Database
- Testing Standards: Meets ASTM D5289, D6048, D6204, D6601, D7050, D8059, and D7605
- Reports and Export Files: Numerous formats including text and Microsoft Excel® Files
- Instrument Languages: Multiple
- Electrical: 100/110/120/130 VAC ±10%, 60 ±3 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/cm² 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)