

# PREMIER™ PDR

Process Dynamic Rheometer

An instrument with focused capabilities that bridge the gap between traditional MDRs and RPAs. This instrument is ideal for customers that require ASTM testing standards for processability, cure, and after cure testing.

## Features

- Meets ATSM D6204, D8059, D5289, and D6601 standards
- Proprietary electronics produce stable measurable over a wide range of torque values
- NIST traceable standards ensure excellent reproducibility worldwide
- Pressure transducer standard to provide pressure measurements in addition to torque
- Extensive ability to organize data into reports and perform statistical analysis
- Sealed biconical dies
- Programmable auto data validation
- Measure dynamic properties of rubber before cure, during cure and after cure
- Operates using Enterprise software, a flexible LIMS software based on a SQL server database

## Performance

- *Dynamic Symmetry™* - a system that ensures dies remain parallel to reduce variation
- *Smart Alignment™* - a system that ensures excellent die cavity sealing for better repeatability
- Enhanced data sampling and processing using up to 64x faster data rate per cycle
- Improved sensitivity to mixing error and/or compound changes

## Options

- Sample handling (5, 10, 36, 112)
- Sample prep
- Wide assortment of films
- Multiple die selections
- Multiple languages

## Specifications

Measured Data:	Torque, temperature, frequency, strain	Testing Standards:	Meets ASTM D5289, D6204, D6601, and D8059
Temperature Range:	Ambient to 446°F (230°C)	Report Export:	Numerous formats including text and Microsoft Excel ©
Electrical:	100/110/120/130 VAC ± 10%, 60 ±3 Hz, 15 amp single phase. 200/220/240/260 VAC ± 10%, 50 ±3 Hz, 7.5 amp single phase.	Dimensions:	Width: 22 in (56 cm) Height: 48 in (122 cm) Depth: 25 in (64 cm)
Max Ramp Rate:	1.8°F/sec (1°C/sec)	Weight:	Net 346 lbs (157 kg), gross 547 lbs (248 kg)
Max Cool Rate:	0.9°F/sec (0.5°C/sec)	Air Pressure:	80 psi (5.6 kg/cm 2551 kPa) minimum
Data Storage:	SQL database	Calculated Data:	G', G'', G*, J', J'', J*, S', S'', S*, tanδ, η', η'', and η*