

PREMIER® MDR

Leading the way
in rheology
science.



This is not our first MDR.

From the scientists who invented the Moveable Die Rheometer, today's Premier MDR introduces new technology that delivers data with the highest consistency and long-term stability, compared to all other moving die rheometers. Premier MDR delivers reliable, repeatable data, batch after batch meeting ISO 6502 and ASTM D5289 standards and requirements. Repeatability also means your data is consistently reproducible from instrument to instrument and factory to factory, worldwide. Your data doesn't shift just because your time zone does.

That's why Alpha is trusted by more top tier rubber and polymer manufacturers than any other brand.

How to compare Premier MDR with all the others.

Stiffer seals with low friction to prevent slippage and leakage and ensure no loss of signal.

Plus, they last longer.

Oil saturated thrust bearings that last longer without greasing for overall lower maintenance costs.

Standard pressure transducer allows measurement of foam performance to determine if the pressure changes through the measurement. This enables you to optimize your formulation and reduce errors.

Separate touchscreen user interfaces – Workbench for instrument management and Online Manager for data analysis. Our custom electronics give you true multi-tasking. Unlike sluggish PLCs used by others, there's no waiting for the test to finish before being able to review data.

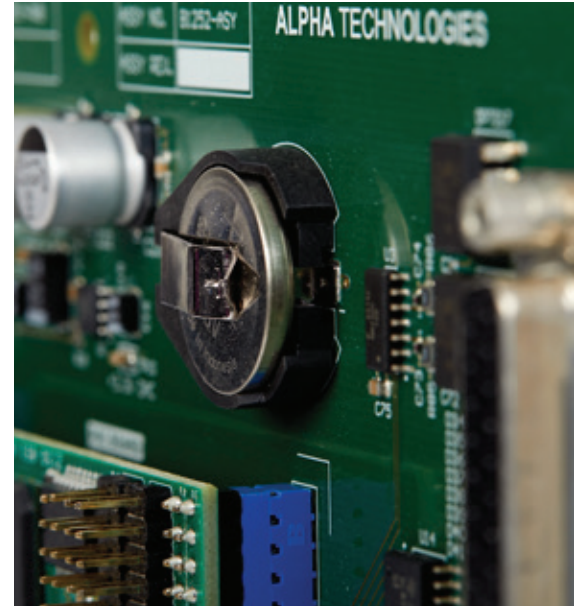
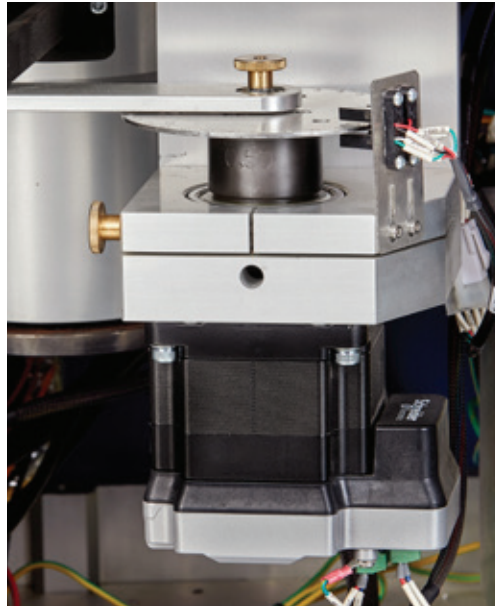
Oversampling captures better signal to noise for more data points per second than anybody else.

Premier's Extended Dynamic Range (EDR) is especially important at low strains where you have a really small signal. EDR gives you the resolution you need. Others tend to give you a lot of noise.

Torque standards you can trust. Alpha is committed to traceable torque standards that make sure your instrument is accurately calibrated. Others use cheaper torque standards (that they don't like to hand out) that have an unacceptable margin of error and need fudge factors to make them come out "right."

Get more value from your Premier MDR. Options that expand your capabilities.

- Rapid Change™ eccentric that allows simple and fast oscillation angle changes (0.2, 0.5, 1, 3 and 7.17 degrees) without calibrating.
- Smart Seal™ optional upper die assembly to eliminate the elastomeric seal for improved long-term data stability and reduced need for torque calibrations.
- 3-side open enclosure makes it easy to add multiple automation options to support low to high volume production demands.



SPECIFICATIONS

Frequency:	100 cpm (.1.687 Hz)
Temperature Range:	Ambient to 446°F (230°C)
Strain:	0.5 Standard (7%); 0.2, 1.0, 3.0 and 7.17 degrees
Onboard:	T10, T50, T90, S* at ML, S* at MH, TD at ML, TD at MH, Max Cure Rate, Time at Max Cure Rate, Pressure point PH-PL and pressure time points
Testing Standards:	Meets ASTM D5289, ISO6502, and DIN 53529)
Electrical:	100/110/120/130 VAC ± 10%, 50/60 ±3 Hz, 10 amp single phase. 200/220/240/260 VAC ± 10%, 50/60 ±3 Hz, 5 amp single phase.
Air Pressure:	60 psi (414Kpa, 4.2 kg/cm2) minimum
Dimensions:	W: 22 in (56 cm), H: 48 in (122 cm), D: 26 in(66cm)
Weight:	Net 350 lbs (159 kg)
LCD Screen:	155 mm x 85 mm, resolution 800 x 480



For more information scan the QR code or visit alpha-technologies.com/premier-mdr.

There's a lot riding on our testing.™



ALPHATECHNOLOGIES

Rheologists and Engineers

ALPHA TECHNOLOGIES

6279 Hudson Crossing Parkway,
Suite 200

Hudson, Ohio 44236

330.745.1641

Alphasales@alpha-technologies.com

www.alpha-technologies.com



There's a lot to like about every Premier Instrument.

- Custom Electronics that are matched to the instrument. Better control. Better resolution.
- Custom Designed Heating Control System that ramps up heating cycles faster and maintains control for more accurate cure times and more efficient production.
- Efficient die cooling that gets your instrument ready for the next test.
- Smart Alignment and Dynamic Symmetry means you get on-target, parallel die closing, high stiffness and constant closing force.
- Cast Aluminum Frame that's lighter... stronger... stiffer.