

PREMIER™ MDR

Moving Die Rheometer

▶ The MDR that's driving the next generation of testing – delivering data with the highest consistency and long term stability of all moving die rheometers.



▶ The Premier™ MDR is built for optimum performance in both laboratory and production environments, the Premier™ MDR's stream-lined design includes an LED back-lit logo for test status indication, a wrap-around front cover and shield for ease of use and access, a touch-screen user interface, and a built-in storage drawer.



ALPHATECHNOLOGIES

PREMIER™ MDR

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alpha-technologies.com

Features



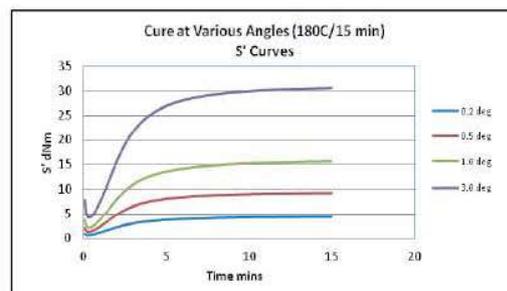
- Versatile LCD touch screen and user interface
- Smaller instrument footprint for effective use of bench space
- Biconical cruciform-less dies with optimized groove profiles to reduce slippage and improve performance with stiffer stocks
- Uniquely designed heater provides reduced temperature gradients and improved temperature recovery
- Improved forced air die cooling with independent control to the upper and lower dies provides rapid temperature changes for better non-isothermal control
- Pressure transducer to provide both torque and pressure measurements included as standard
- Operates using Enterprise software, a flexible LIMS system based on an open SQL database platform



Performance



- Unsurpassed test repeatability and reproducibility
- DYNAMIC SYMMETRY™ - A system that ensures parallel die closing, reducing variation
- SMART ALIGNMENT™ - A system that ensures excellent die cavity sealing for better repeatability
- SMART SFAI™ - An optional upper die assembly to eliminate the conventional elastomeric seal while maintaining a closed, pressurized cavity for improved long-term data stability and reduced need for torque calibrations (Lower Die Long Life Seal – Standard)
- RAPID CHANGE™ - An optional adjustable eccentric option that allows simple and fast oscillation angle changes without the need for re-calibration (0.5 degrees arc is standard)



Options



- Oscillation amplitudes of 0.2, 1.0, 3.0, and 7.17 degrees arc mechanically set
- Automation (5, 10, or 112 samples)
- Constant volume sample cutter
- Film to protect dies and seals from contamination and wear
- Multiple languages available

Specifications



FREQUENCY:	100 cpm (1.67 Hz)	TESTING STANDARDS:	Meets ASTM D5289, ISO6502, and DIN 53529
TEMPERATURE RANGE:	Ambient to 446°F (230°C)	ELECTRICAL:	100/110/120/130 VAC +/- 10%, 60 +/- 3Hz, 10amp, single phase
STRAIN:	0.5 Standard (7%); 0.2, 1.0, 3.0 and 7.17 degrees (2.8%, 14%, 42% or 100%) available	AIR PRESSURE:	200,220,240,260 VAC +/-10%, 50Hz +/- 3amp single phase
ONBOARD:	ML, MH, MH-ML, Ts1, Ts2, 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	DIMENSIONS:	W: 22 in (56 cm), D: 26 in (66 cm), H: 48 in (122 cm)
		WEIGHT:	346 lb (157kg) approx
		LCD TOUCH SCREEN:	155mm x 85mm, resolution 800 x 480