

DRI PROVING GROUND FRICTION MEASUREMENT DEVICE

The DRI Proving Ground Measurement Device is a pickup truck - trailer combination that can make pavement friction measurements using either a braked tire at zero lateral slip angle, or a free rolling tire at a fixed lateral slip angle. This equipment is normally used to monitor the surface properties of the DRI Minter Proving Ground as required for various test programs such as the NCAP Vehicle Rollover Evaluations or Vehicle Stability Assist Evaluations.

Measurements

- Test Tire Velocity
- Free Rolling Tire Velocity
- Longitudinal Tire Force
- Lateral Tire Force
- Vertical Tire Force
- Braking Moment
- Overturning Moment
- Aligning Moment



Example Test Protocols

- ASTM E1337 Chirp Test (Dry)
 - Peak Friction Coefficient (PFC) for ramp braking application
 - 1031 lb (4586 N) vertical tire load
 - 0 lateral slip angle
 - 40 mph (64 km/h) test speed
 - ASTM E1136 Standard Reference Test Tire (SRTT)
- NCAP Roll Resistance Lateral Friction
 - Lateral Friction Coefficient for free rolling tire at fixed 7.5 deg lateral slip angle
 - 1031 lb (4586 N) vertical tire load
 - 40 mph (64 km/h) test speed
 - ASTM E1136 Standard Reference Test Tire (SRTT)

DRI specializes in applied research, development, and consulting in the areas of vehicle dynamics and control, man-machine systems, human factors, biomechanics and structural mechanics. For further information please contact us at 310-212-5211, visit our web site at www.dynres.com, or email us at info@dynres.com.