To ensure our products deliver the performance and reliability you demand, we put every Eaton differential through a rigorous schedule of validation testing at our 600-acre Proving Grounds. Component-level and full vehicle-level performance and durability testing takes place in our state-of-the-art labs and on these test scenarios:

- 1.6-mile oval track
- Rally course
- 20% split mu grade
- Sand pit
- Twist ditches
- 45% & 60% hill climb
- Log walk
- Rock crawl
- Swamp course
- Jennite skid pads
- Rubicon trail
- Spin pit

Software and controls
The brains behind smart differentials
This is an exciting time for Eaton. Today’s vehicles are comprised of a complex system of integrated components that “talk” to each other. Our smart differentials offer a range of features from hardware diagnostics to vehicle dynamics controls to improve performance and efficiency.

Did you know?

- MLocker® first appeared in the 1970 Chevrolet® 3/4 ton pickup, and millions have been produced since then.
- The ELocker® was originally developed for the Hummer H1®
- Engineered to meet today’s higher driveline torques, the Direct Acting ELocker® is an electronic locking differential that’s faster, stronger and smoother
- Derived from the term “Postraction” (used by GM in the late 1960s) the Posi® has been the choice of American OEMs for more than 50 years
- The TrueTrac® features no wearable parts and was the original helical-gear-style limited-slip differential
- The InfiniTrac™ is the first commercially successful application of an electronically controlled, hydraulically actuated variable-bias limited-slip differential
- The IntelliTrac™ enhances control with industry-leading response time (faster than the blink of an eye)

To learn more, visit eaton.com/differentials.
From the first moment of vehicle acceleration, Eaton differentials are at work efficiently maximizing traction control. Our complete portfolio of torque products covers a wide range of vehicle needs for our original equipment customers and includes automatic locking, automatic limited-slip and smart differentials. Each differential is highly engineered, tested and validated for virtually every traction surface.

**Limited-Slip Differentials**
- Electronic limited-slip differential
- Hydraulic operation
- Identifies optimal traction resolution at any speed
- Spooling eLSD with lock capability
- Compatible with other active chassis systems – ABS, ESC, active suspension, tire pressure
- Packages to rear or IRS axles with no special carrier
- Provides increased traction and maneuverability
- Improves trailer sway control

**Smart Differentials**
- Electronic limited-slip differential
- Hydraulic power, precision control
- Fully variable torque distribution from open to 100% locked
- Industry leading response time = Engages in less than 100 ms. Changes in less than 80 ms. Integrated using existing vehicle sensors to optimize traction in all conditions
- Enhances all-speed traction in all conditions

**Locking Differentials**
- Mechanical locking differential
- Fully automatic
- Engages when speed >120 RPM wheel slip is detected
- Provides 100% axle lock when needed
- Operates automatically when need for increased traction is detected
- Smooth engagement

Note: Eaton portfolio is compatible with ABS and traction/stability systems.