



The Perfect Dynamometer for the Future of Automotive Technical Education:  
Mustang's ***MD-AWD-150-SE-EV***



Shown with premium post restraints



Customizable drive cycles include speeds and grades



**HOLE SHOT™**  
Control Software

Mustang Dynamometer's E-Mobility testing solutions are perfect for the future of automotive technical education: testing for a wide variety of EVs, designed for remote teaching and learning, automatic system upgrades via cloud computing, and support via the web.



**MD**  
MUSTANG  
DYNAMOMETER

**Mustang Dynamometer**

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**MD-AWD-150-SE-EV**

With the growing market of electric vehicle (EV, BEV, HEV, PHEV, FCEV), Mustang Dynamometer has developed a series of chassis dynamometers that are cost-effective, highly accurate, and designed for testing EVs with advanced testing road-load simulation capabilities.

- Mechanically-linked all-wheel-drive Design
- Efficiency Energy Loss Evaluation of EVs
- Precision Road-load Simulation
- kWh/mile Evaluation for EVs
- Battery Power Measurement (Optional)
- Longer wheelbase available

**Why Chassis Dynamometers**

The MD-AWD-150-SE-EV series of chassis dynamometers were designed for testing of both 2WD and AWD electric vehicles. AWD models with a mechanically-linked roll system are available to accommodate wheelbase ranges from as short as 89-inches all the way up to 127-inches without needing to adjust the rollers.

A mechanically-linked AWD roller system synchronizes the front and back roller speeds to simulate a flat, dry road condition. Synchronization, or linkage, insures that the front and rear rollers are always spinning at precisely the same road speed when in AWD Mode, thereby eliminating the possibility of activating a vehicle's traction control system and insuring that a vehicle's torque management system is operating under the assumption that the vehicle is not skidding, turning or slipping.

**MD-AWD-150-SE-EV**

Roll Diameter:	8.575" (217.81 mm)
Roller Surface:	Knurled
Rotation:	Bi-Directional
Roll Face Length:	35" (889 mm)
Roll Inner Track Width:	18" (457 mm)
Roll Outer Track Width:	88" (2235 mm)
Maximum Roller Speed:	130 MPH (209 KPH); <i>Higher speeds optional</i>
HP Measurement:	1,000HP (745.7 Kw) <i>Traction limited</i>
Peak PAU Absorption:	400-HP ( 298.28 Kw) nominal
PAU Torque Measurement:	S-beam load cell; accuracy 0.10% nominal
Speed Measurement:	Encoder - accuracy <0.01% F.S.
System Response Time:	100 ms nominal
Front & Rear	Mechanically-Linked / Coupled
Roll Synchronization:	
Wheelbase range and Inertia Values	
Standard AWD	89" to 127" ; 4,500 lbs of inertia, nominal 2,261 mm to 3,226 mm ; 2041 kg of inertia <i>Custom wheelbases and inertias are optional</i>
Maximum Axle Weight:	6,000 lbs. (2,722 kg) per axle <i>Custom heavier axle weights available</i>

*Note: Inertia is expressed in equivalent vehicle weight term*

