

E-Mobility Testing Solutions for Schools



The Perfect Dynamometer for the Future of Automotive Technical Education:

Mustang's MD-AWD-15D-5E-EV



Tools for Educating Future Automotive Technicians



Shown with premium post restraints



Customizable drive cycles include speeds and grades





HOLE SHOT "

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.





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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:	Uni-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); Higher speeds optional
HP Measurement:	1,500HP (1,118.6 Kw) Traction limited
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 Roll Synchronization:	Mechanically-Linked / Coupled
Wheelbase range and Inertial Standard AWD (Extended wheelbase optional)	Natures 88" to 127"; 4,100 lbs of inertia 2,235 mm to 3,226 mm; 1,860 kg of inertia
Maximum Axle Weight:	6,000 lbs. (2,722 kg) per axle
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Note: Inertia is expressed in equivalent vehicle weight term







