AC/EC HYBRID SERIES

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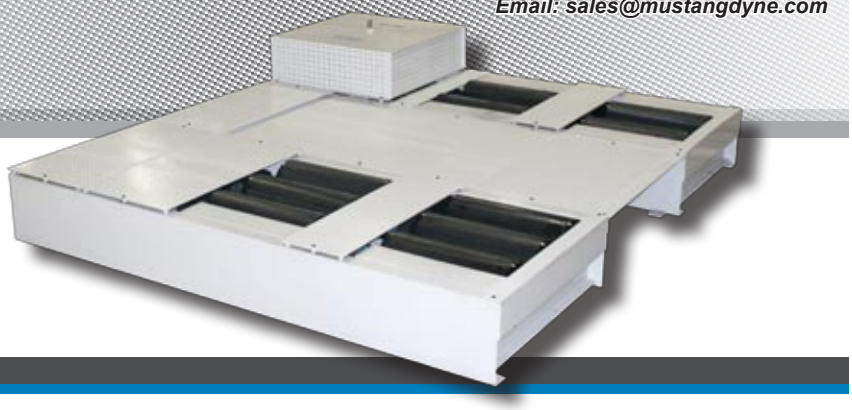
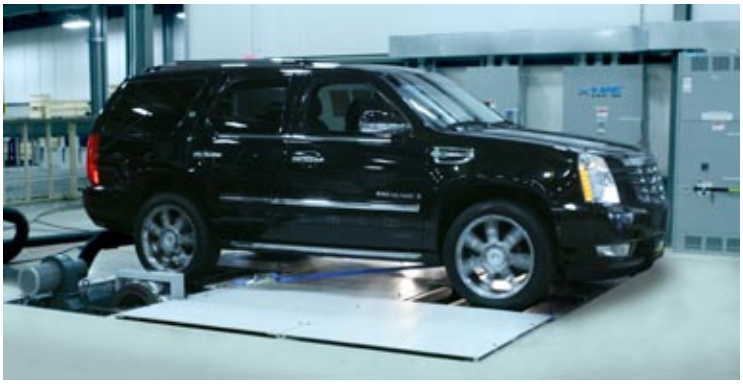


AWD-500-AC/EC-100/250



THE AWD-500-AC/EC HYBRID SERIES. Mechanically-linked AWD Hybrid & Electric Vehicle development dynamometers.

With the Hybrid and Electric Vehicle segment growing at such an astonishing rate, Mustang developed the AWD-AC/EC Hybrid Series to provide highly accurate and sophisticated HEV and EV R&D dynamometers that are both cost effective and loaded with advanced testing and simulation capabilities.

The AWD-500-AC/EC Hybrid Series Chassis Dynamometers were designed for pre-certification development and testing of both 2WD and AWD hybrid and electric vehicles with wheelbase ranges from 88-inches to 118-inches.

A mechanically-linked 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.

The AWD-500-AC/EC Series incorporates an AC drive motor and a powerful air-cooled eddy current power absorption unit to provide the perfect combination of precision and economy. Systems are available with AC Motors ranging from 100-hp up to 600-hp and with one or two air-cooled eddy current PAUs for extended testing to meet the needs of your application.

The AWD-500-AC/EC Series provides a cost-effective design and enables quick development cycles for performing initial hybrid and electric vehicle calibrations, traction system motoring, regenerative braking and limited traction conditions using road load and federal drive cycles, electric power systems analysis, HEV/PHEV/EV controller development, efficiency testing, fuel consumption testing, and other complete vehicle or sub systems simulations.

Mustang Advanced Engineering - Developing Solutions For A Greener World.

Specifications

Roll Diameter:	12.625" (320.68 mm)
Roller Surface:	Knurled (STANDARD), Chrome (OPTIONAL)
Rotation:	Bi-Directional
Roll Face Length:	31 Inches (787.4 mm)
Roll Inner Track Width:	18 Inches (457.2 mm)
Roll Outer Track Width:	STANDARD 80 Inches (2032 mm) OPTIONAL - 98 Inches (2489 mm)
AC Motor Rating:	100-HP @ 65-150 mph
HP Measurement:	3,000-hp
Peak PAU Absorption:	900-hp (SE), 1,800-hp (DE)
Maximum Roller Speed:	150 mph (241 kph)
Torque Flange Accuracy:	± 0.05% F.S.
Base Inertia:	2,152 lbs. AWD Mode / 1,190 lbs. 2WD Mode (976 Kg AWD Mode / 540 Kg 2WD Mode)
Total Wheel Force:	1071 lbs. (486 Kg) Continuous @ 65-mph 2856 lbs. (1295 Kg) Intermittent @ 65-mph
System Response Time:	< 100 ms
Front & Rear Roll Synchronization:	Mechanically-Linked / Coupled
Wheelbase Range:	STANDARD: 88 - 118 Inches (2235 - 1997 mm) SHORT +1: 66.5 - 111 Inches (1689 - 2819 mm) SHORT +2: 66.5 - 125 Inches (1689 - 3175 mm) LONG +1: 88 - 132 Inches (2235 - 3353 mm) LONG +2: 88 - 146 Inches (2235 - 3708 mm)
Maximum Axle Weight:	6,000 lbs. (272.4 Kg) per axle
Machine Shipping Weight:	9,000 lbs. (408.6 Kg)