

# AWD All Wheel Drive ASM Centralized Chassis Dynamometer

The MD-AWD-150-M tests both axles of the test vehicle under the same imposed load; while at the same time providing for front-to-rear axle speed synchronization. Front-to-back roller speed synchronization protects AWD center differentials, provides for a means to safely test 2WD vehicles with traction control, and allows for testing to be performed under real-world load conditions. Without a transmission, an AWD dynamometer can only be used in steady state or ramp control mode - limiting its usefulness as a real-world testing tool.



The MD-AWD-150-M accommodates wheelbases from 96 to 122 inches (244-310 cm) without moving parts. An air actuated coupling allows for a means to disengage the system from AWD mode with the push of a button. This important feature will allow the operator to use only the roll sets required and increase the life of the system.



## MD-ASM-150-M AWD (MD-AWD-100-M) Chassis Dynamometer

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| <i>Horsepower:</i>         | <i>300 hp peak absorption</i>  |
| <i>Loading:</i>            | <i>Air-cooled eddy current power absorber (model MDK-70)</i>   |
| <i>Motor:</i>              | <i>15 hp calibration motor</i>   |
| <i>Rolls/Wheelbase:</i>    | <i>Precision machined &amp; dynamically balanced knurled finish rollers<br/>Belted for bi-directional capability<br/>8.575" (218 mm) diameter balanced rolls<br/>35" face length<br/>18" inner track width<br/>88" outer track width<br/>96" - 122" standard wheelbase accommodation</i> |
| <i>Transmission:</i>       | <i>Heavy-duty, industrial-fiber belt drive with mechanical disconnect</i>  |
| <i>Air Clutch:</i>         | <i>Automatic air clutch to disengage the front roll set from rear</i>  |
| <i>Frame:</i>              | <i>Heavy-duty structural steel frame<br/>Height: 12"</i>   |
| <i>Roll Decelerator:</i>   | <i>Allows vehicle deceleration without use of vehicle brakes<br/>Eddy Current PAU used to decelerate rollers</i>   |
| <i>Air Requirements:</i>   | <i>80 PSI, dry, regulated, oil free</i>  |
| <i>Power Requirements:</i> | <i>115 VAC, single phase, 50/60 Hz, 15 Amps (computer)<br/>230 VAC, single phase, 50/60 Hz, 30 Amps (dynamometer)<br/>230 VAC, three phase, 50/60 Hz, 30 Amps (motor drive)</i>  |
| <i>Axle Weight:</i>        | <i>7,720 lbs (3,500 kg) maximum 1 axle</i>   |
| <i>Shipping Weight:</i>    | <i>9,000 lbs (4,090 kg) (dynamometer weight only)</i>  |