

# AUTOMOTIVE CHASSIS DYNAMOMETER

Model ACD-500



This high power chassis dynamometer can extract 500kW of mechanical power from competition vehicles, including cars and trucks. Its heavy-duty frame and deep-groove textured 12-inch roller are ideal for high power applications without tire slip. The air-cooled eddy current dynamometer requires no external cooling lines, and is easy to install and use, giving years of trouble free service. The sophisticated controller can operate the dynamometer from the front panel or from a computer via the remote mode. Control modes include Manual Load, Speed, Torque and Road Load control. The dynamometer can hold the vehicle under test at a given speed for tuning, or fuel consumption measurements, or mimic actual road load conditions. Drive cycle software is included allowing vehicles to be tested on any drive cycle required. Additional inputs are included for Data Acquisition, display and logging.

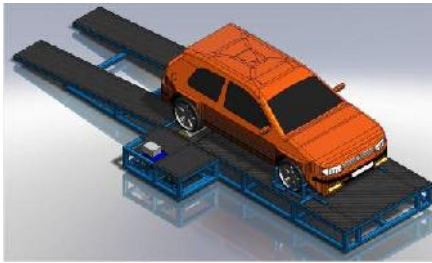
## FEATURES

- 500kW (670hp) mechanical power absorption
- 300kph (186mph) top speed
- 12 inch deep-textured roller
- 5<sup>th</sup> Generation controller included
- Integrated DAQ Input Channels for Logging
- Adjustable Nose for various wheel-base
- Free computer software for Graphic Display
- 1 Year Warranty Included

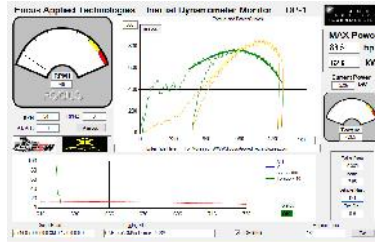


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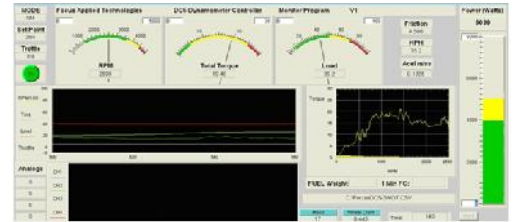
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Rear-approach ramp



"Power Pull"



R&D Screen Shot

## SPECIFICATIONS

### PHYSICAL

Weight: 750kg (approx)  
LxWxH: 312 x 235 x 50 cm  
Deck: 302 x 90 x 43 cm

### MAINS POWER

Voltage: 120/240VAC  
Frequency: 50/60Hz  
Current Draw: 10/5A max

### CONTROLLER OUTPUT

Controller Power: 3.5kW (100V, 35A)  
Coms: 9600 baud, 8bit, NP

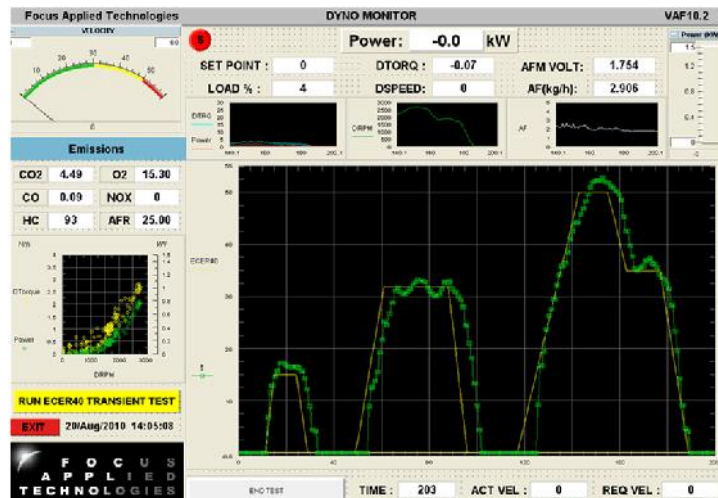
### DYNO

Mechanical Power: 670hp max  
Torque: 1000Nm max  
Roller: 320mm diameter  
Speed: Hall Effect, 5V excitation  
30 pulse per revolution  
3,500 rpm, 200kph maximum  
Load Cell: 1250Nm, 200 to 500 ohm  
4-wire Wheatstone bridge  
5 or 10V excitation

### ENVIRONMENTAL

Temp: 10 to 40° C Operational  
0 to 50° C Non-Operational  
Humidity: 5 to 90% Non-condensing  
Shock/Vibe: <10g

The Super Bike Chassis Dyno is widely used by tuning shops to prove power increases to customers. It is also extensively used by R&D organizations and for trouble shooting tough problems, as it can hold the bike at a constant load or speed, unlike inertial dynos. Road load mode can simulate road performance for drive cycle testing for emissions or fuel consumption certification testing.



### OPTIONS

- High-volume, low noise blower and stand
- Wide Band O2 (AFR) sensor
- Digital Fuel Scale
- 5-Gas Analyzer
- Current/Voltage Clamp Meter
- In-floor or Ramp versions available