



Driven.

## VEHICLE DYNAMICS

ENGINEERING - INNOVATION - PRECISION

Think Differently. Think Dynamically.

S-E-A's Vehicle Dynamics group has developed a **Light Vehicle Dynamometer**, which is capable of evaluating a wide range of vehicle configurations and speeds. Doing so without a rider and in our laboratory setting allows us to provide the most controlled, safe, and repeatable analysis.

Configurations have been developed to:

- Manually add rider ballast OR automatically provide rider loading via actuators
- Simulate road load via flywheel inertia OR via electronic braking systems
- Measure speed, acceleration, temperature, voltage, and current

### KEY FEATURES

- The vertical spars on the machine allow for loading of the vehicle under test over the seat, footpads, or other user-interface of the device.
- Throttle control is available for vehicles with tilting footpads, as well as a throttle control add-on which allows for control of thumb-levers, twist grips, and other throttle mechanisms.
- An easy-to-use GUI communicates with the real time hardware to perform data collection, provide a controls interface, and evaluate data.

# LIGHT VEHICLE DYNAMOMETER

Vehicle testing for: E-BIKES, ATVS, E-SCOOTERS, HOVERBOARDS, SKATEBOARDS, UNICYCLES...and more!



### SPECIFICATIONS

Dimensions	92.5" (L) x 42" (W) x 68" (H)
Categories of Devices	Youth ATV, Stand-Up Electric Scooter, Electric Bicycle, Hoverboard, Electric Unicycle, Electric Skateboard
Device Detail	Wheel Sizes up to 30" Diameter
Measurements	Vehicle Speed (left/right) vs. Time Distance Traveled vs. Time
Maximum Speed	55 mph
Simulated Rider Load	30 - 250 lb. (variable)
Simulated Road Load	50 - 393 lb. (variable)
Other Features	E-Stop, Windows 11 Computer, Tilt Control via GUI

To schedule a demo or request more information:

[VehicleDynamics@SEAlimited.com](mailto:VehicleDynamics@SEAlimited.com)



SEE THE DYNO  
IN ACTION!

(Please see page 2 for more info.)

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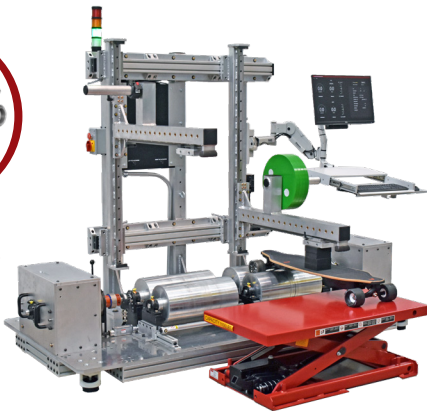
YOUTH ATVS



STAND-UP  
ELECTRIC  
SCOOTERS



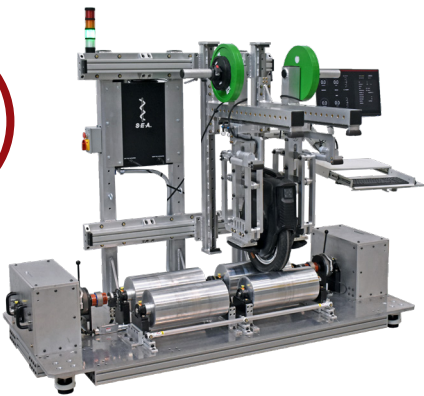
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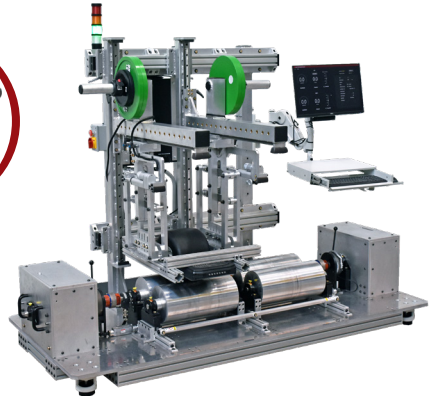
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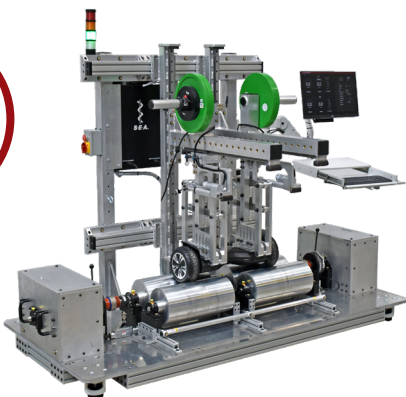
ELECTRIC  
UNICYCLES



ELECTRIC  
UNICYCLES



HOVERBOARDS



SEGWAYS

