

# PROJECT SPOTLIGHT

## Lion Electric - EV End-of-Line Test Stand



Mustang Advanced Engineering (MAE), an American manufacturer of quality, industry-leading, testing equipment, dynamometers, and related products, has delivered an end-of-line (EOL) test stand for Lion Electric, an innovative manufacturer of zero-emission vehicles, such as all-electric commercial urban trucks and buses for schools and mass transit. Lion contacted MAE in 2022 to design and build the end-of-line chassis dynamometer capable of testing single and tandem axle heavy duty electric vehicles.

The test stand is designed to perform quality control testing of on-road electric trucks and buses. The system performs performance testing, functional testing, visual inspections, and brake testing. The software will be configured to allow the operator to use a wireless tablet with integral bar-code scanner

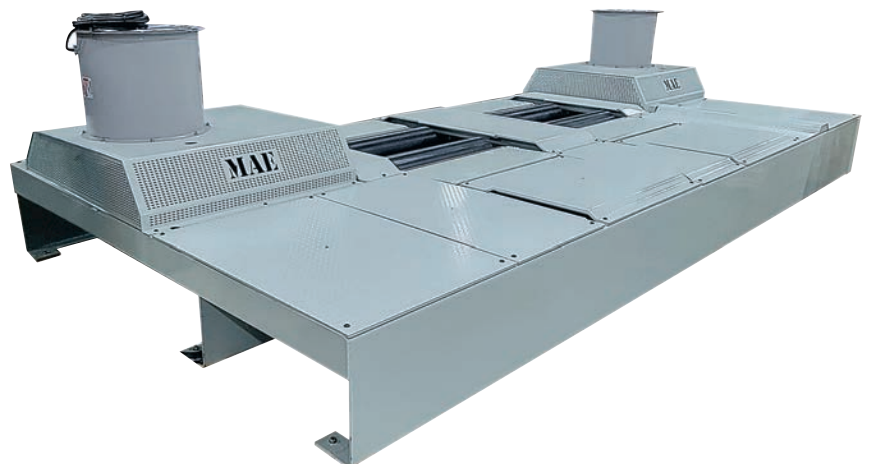
to communicate with the control system. The system will be equipped to communicate with the vehicle's ECM to collect data during the testing process such as engine RPM, coolant temperature, charging status, and much more.

The software will guide the operator through the entire testing process without leaving the vehicle. All data collected by the test system will be stored on the control PC and can be transmitted to the facility's host computer if desired. The software is extremely flexible and user friendly, allowing test engineers to modify test parameters, pass/fail limits, etc.

 **LION ÉLECTRIQUE**

### SNAPSHOT

Project: EV End-of-Line Test Stand  
Customer: Lion Electric  
Where: Channahon, Illinois  
Purpose: End-of-line, quality control production testing of single and tandem axle heavy duty, electric buses and urban trucks for performance, functional testing and brake testing



The chassis dynamometer is equipped with several features to meet the customer's stringent testing requirements such as:

- Automatic pop-up restraints to increase vehicle throughput
- Additional base inertia provides superior drive-ability
- Integrated bogie roll set to allow testing of tandem axle vehicles
- Wheel protection and sound proofing around wheel areas
- Exhaust gas extraction for heater/generator
- Fencing around the dynamometer area for added safety

*"MAE's ability to provide sophisticated test stands in an extremely economical manner has led to another end-of-line test stand award from a major OEM"*

*- David Ganzhorn, V.P. Sales*



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### About MAE

Mustang Advanced Engineering is a leading supplier of advanced, custom engineered testing and measurement systems. Located in Twinsburg, Ohio since 1986, MAE delivers world-class testing solutions, custom design support, technical assistance, backed by a dedicated factory service team, making them a trusted source of expertise for the global industrial market. Visit [MustangAE.com](http://MustangAE.com) for more information. Follow them on Facebook, Twitter, LinkedIn, and Instagram

