PROJECT SPOTLICHT



R&D Heavy-Duty Dynamometer at Texas A&M



Mustang Advanced Engineering (MAE), an American manufacturer of quality, industry-leading testing equipment, dynamometers, and related products, has installed a custom dynamometer for the research and development of heavy-duty trucks, including electric powered trucks, at the Texas A&M Transportation Institutes (TTI) Environmental Evaluation and Research Facility (EERF) in Bryan, Texas.

With expertise in engineering, planning, economics, policy, public engagement, landscape architecture, environmental sciences, data sciences, social sciences and more, TTI professionals are thought leaders in their fields. They produce practical, implementable products and strategies, and ensure that our sponsors have the research-based results they need to make informed decisions.



section is in a climate-controlled room to simulate Interstate driving in different road conditions and temperatures. The inertia wheel and load simulating Power Absorption Unit (PAU), and AC electric motor are in a separate room where the temperature created by the load will not affect the test.

"This project was unique in regards that there was an existing dynamometer at the University that Mustang was able to re-use some existing parts and elements, which was a cost reducing factor in the project," said Michael Caldwell, Senior Account Manager at Mustang. "MAE is more than capable of producing test stands at any scale," Caldwell continued. "Our rugged

The large dynamometer was installed below ground and contained in two rooms. The rolls

SNAPSHOT

Project: Heavy-duty, Research and Developemnt Chassis Dynamometer for Trucks and E-Mobility Testing Customer: Texas A&M Transportation Institutes (TTI) Environmental **Evaluation and Research** Facility (EERF)) Bryan, Texas Where:



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design philosophy along with state-of-the-art control technology provides our customers unparalleled performance in these challenging applications."

Some features and benefits of this system are:

- Cost effective, as the project re-used components of a previously installed dynamometer at TTI, including the AC motor
- This test system is used for research and development of solutions to complex transportation challenges
- Dynamometer rolls section is contained within a climate-controlled chamber

MOE

• Capable of handling 80,000-pound GVWR (Gross Vehicle Weight Rating) trucks, as per state maximum limits

"...MAE is more than capable of producing test stands at any scale. Our rugged design philosophy along with state-of-the-art control technology provides our customers unparalleled performance in these challenging applications."

- Michael Caldwell, Senior Account Manager at MAE





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About MAE

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



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