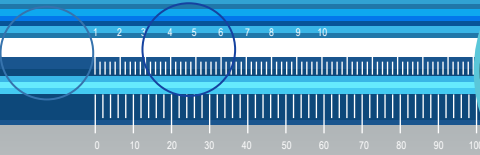
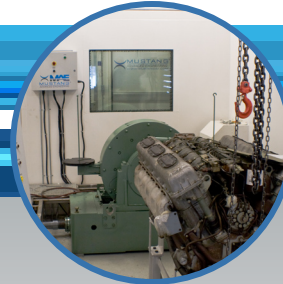
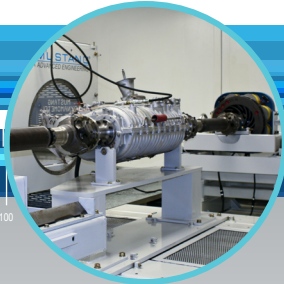


# Project Spotlights

An MAE publication highlighting some of the latest advanced engineering projects.

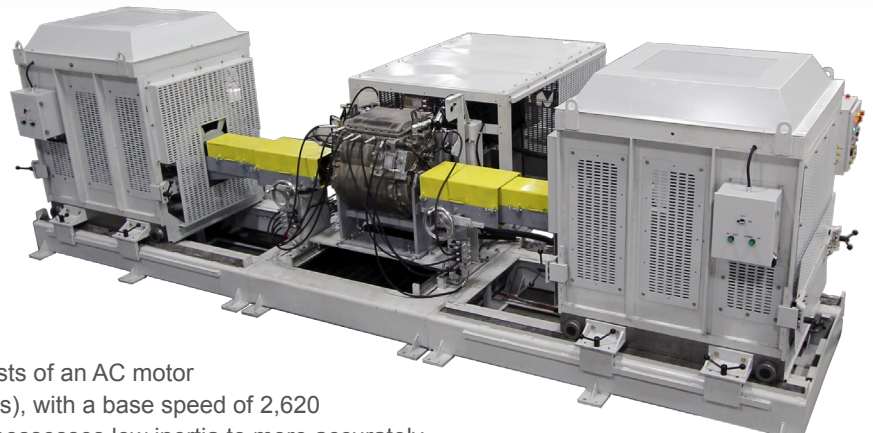


## MAE Delivers Turnkey Heavy-Duty Cross-Drive Transmission Dynamometer for X200-4A Transmission Test Cell to Anniston Army Depot

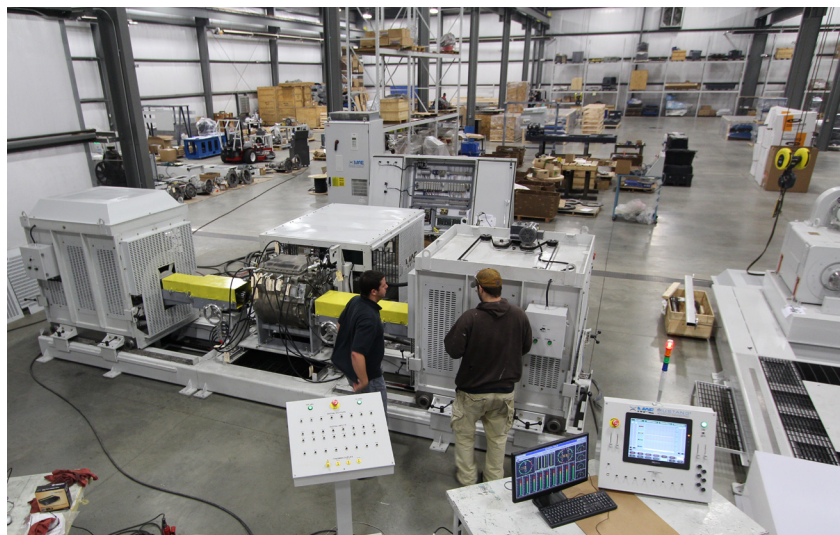
November 2011 - Twinsburg, Ohio - Mustang Advanced Engineering recently delivered a heavy-duty transmission dynamometer for testing of the X200-4A transmission for the Anniston Army Depot. The state-of-the-art test cell was designed by MAE to efficiently accommodate the transmission test stands, while meeting all required codes for mechanical and electrical hook-ups as put forth by the State of Alabama.

The system can perform a multitude of tests, including:

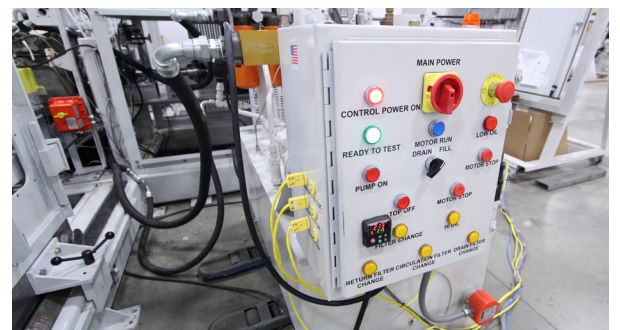
- Check shift points (automatic transmissions)
- Full throttle upshift test
- Downshift inhibitor test
- Check for abnormal noise and vibration
- Check transmission control system
- Closed throttle downshift test
- Leak check shaft seals and clutches
- Check main, clutch, and converter pressures
- Determine mechanical binding

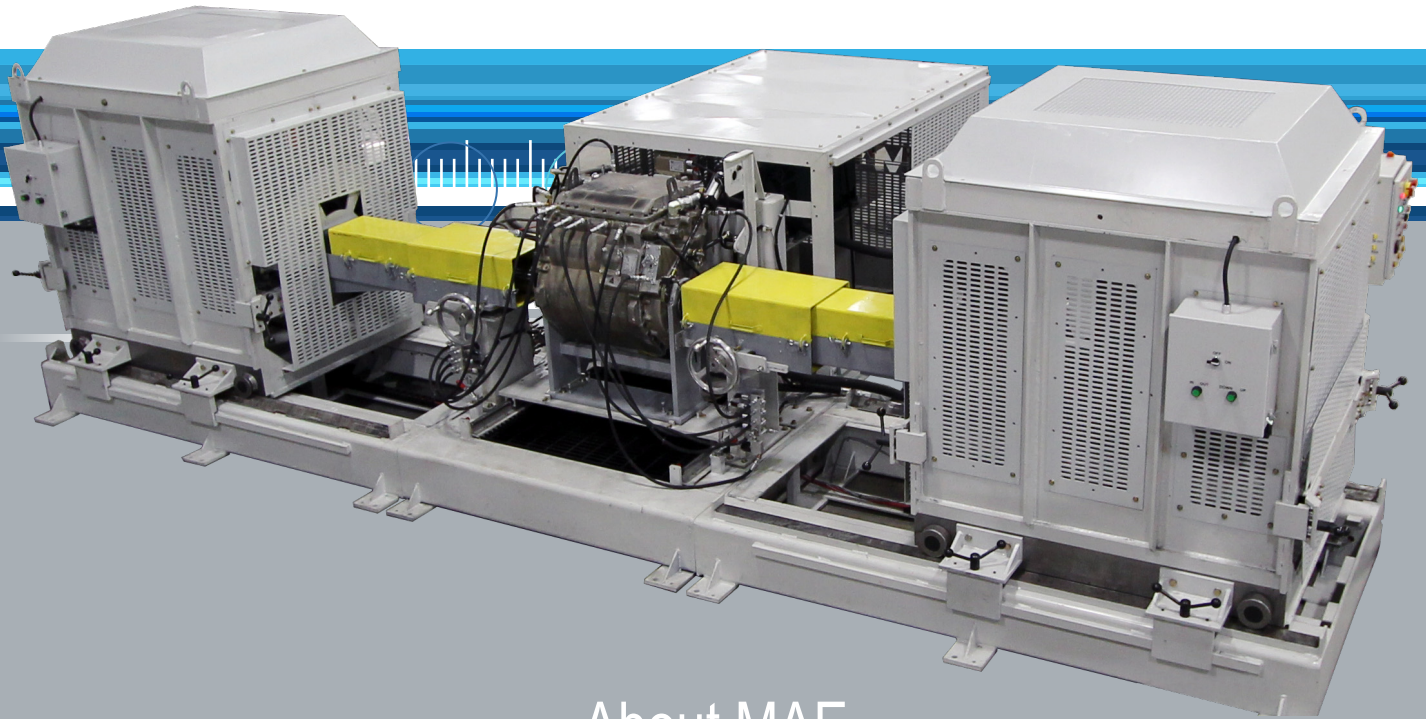


The X200-4A transmission test stand power package consists of an AC motor drive and electric prime mover, rated for 325 HP (continuous), with a base speed of 2,620 rpm and maximum speed of nearly 4,000 rpm. The motor possesses low inertia to more accurately simulate the inertia values seen by the transmission when connected to an engine. This lower inertia value provides better up/down shift simulation due to the motor's inertia value being in the range of a typical engine's inertia value.



The test stand's power absorption units are bi-directional eddy-current PAUs which provide high performance loading torque. The PAU's are capable of up to 2,000 lb-ft of dynamic load torque with a maximum speed of 4,000 rpm. Air actuated caliper brakes are incorporated into the load units for stall testing.





## About MAE

Mustang Advanced Engineering is a leading provider of comprehensive testing solutions for the development and testing of engines, powertrain systems and complete vehicles. Founded in 1975, Mustang has long been a trusted source of expertise in measurement and testing technologies for the global industrial market. World-class product offerings, custom design support and technical assistance, backed by a dedicated factory service team, has positioned MAE among the global leaders in providing advanced testing solutions.

**ISO 9001:2000 Certified**

**Offices Worldwide**

**U.S. Corporate Headquarters**  
**Mustang Advanced Engineering**  
2300 Pinnacle Parkway  
Twinsburg, OH 44087  
Phone: (330) 963-5400  
Fax: (330) 425-3310  
Email: [sales@mustangae.com](mailto:sales@mustangae.com)

As a global leader in the design, manufacturing, and integration of advanced testing and measurement systems, MAE has delivered and continually supports literally thousands of test systems to virtually every corner of the globe.

Our mission is to achieve the highest possible level of customer satisfaction by providing innovative technical solutions and product designs and by striving to achieve perfection in product quality, delivery and service. At MAE, our customers are our highest priority - we do everything in our power to satisfy our customers. Our entire organization understands that the customer comes first and nothing else is more important.

To learn more about how MAE can help solve your most demanding testing challenges contact one of our sales engineers or visit [www.mustangae.com](http://www.mustangae.com).

[www.mustangae.com](http://www.mustangae.com)

advanced engineered testing solutions