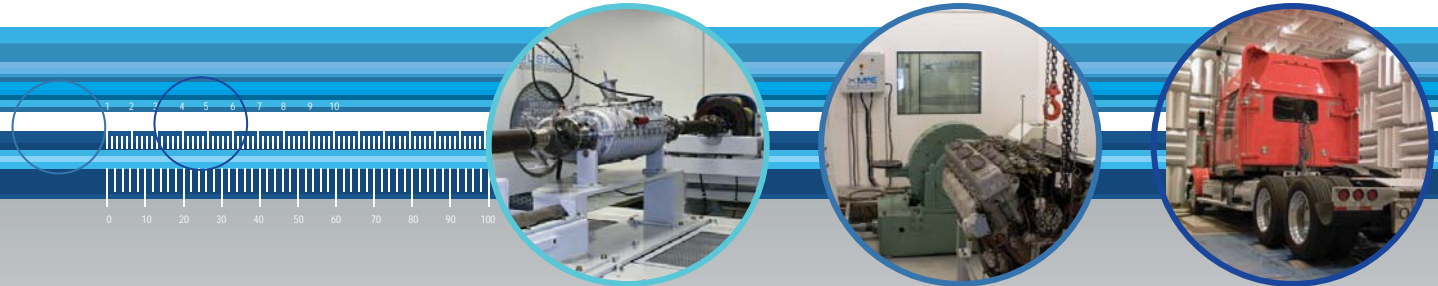


Project Spotlights

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



MAE Delivers Turnkey HSU Test Stand designed to test the X1100-3B Hydraulic Steering Unit (HSU) for Anniston Army Depot

December 2011 - Twinsburg, Ohio - Mustang Advanced Engineering recently delivered an HSU test stand designed to simulate transmission input speeds and loads and vehicle output loads to the X1100-3B. The testing stand has the ability to control both the HSU's input speed and output loads, allowing the operator to apply loads to the HSU as though it is in the vehicle. Cooling/Heating of the HSU will be accomplished with in tank heaters and thermostatically controlled oil to water heat exchangers located in the test tank and oil reservoir systems.

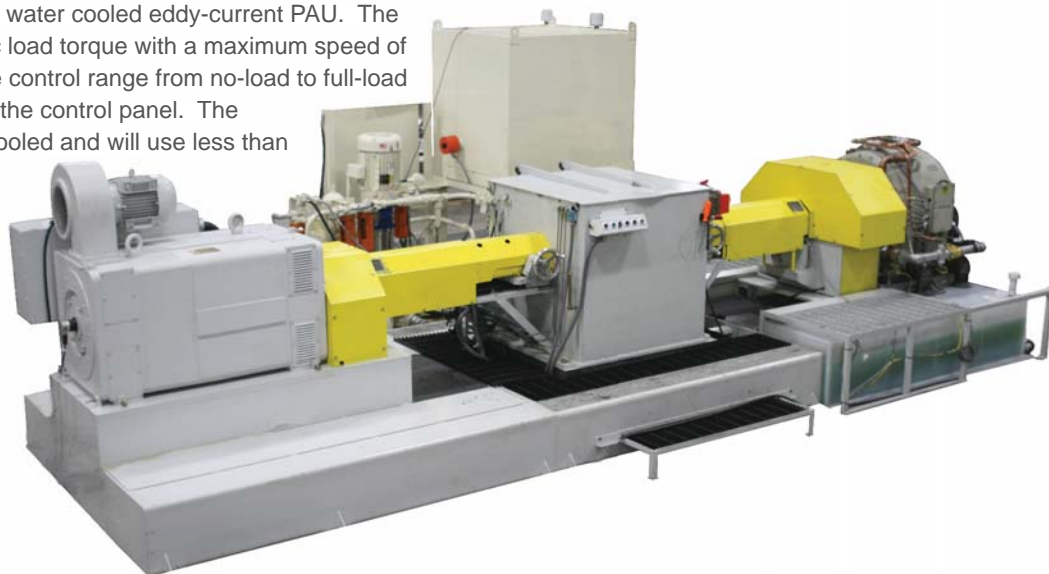
The HSU Test Stand will consist of 8 primary components:

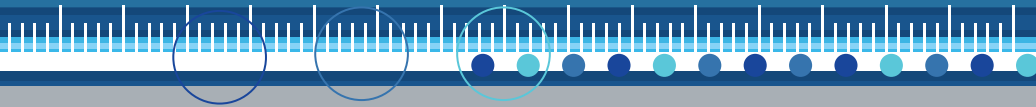
- Input Drive Unit Assembly
- Power Absorption Unit Assembly
- HSU Container Assembly
- Test Stand Base Frame
- Oil Lubrication System
- Test Stand Tooling - Adapters, Fixtures and other hardware
- Roll Over Stand
- Test Stand Instrumentation

The X1100-3B HSU test stand power unit consists of a variable frequency AC motor drive and a variable speed AC electric motor prime mover. The test stand's prime mover is an electric motor that is rated for multi-directional and reliable variable speed control. The prime mover is continuously rated at 1,455 HP with a base speed of 2,500 rpm and maximum speed of 3,990 rpm.

The test stand's output PAU is a bi-directional water cooled eddy-current PAU. The PAU is capable of up to 4,000 lb-ft of dynamic load torque with a maximum speed of 3,330 rpm. The PAU has an infinitely variable control range from no-load to full-load which is controlled via a manual controller on the control panel. The eddy-current power absorption unit is water cooled and will use less than 150 gpm of cooling water at 85°F.

"Mustang is proud to deliver this complex and extremely important test stand to Anniston Army Depot" said Dean Ganzhorn, Mustang President and CEO. "These HSUs are important to the success of the military and Mustang prides itself on delivering a quality and efficient test stand."





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.

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.

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