

May 31, 2002



## Mustang goes head-to-head with GM Electro-Motive's Diesel-Electric Locomotives.

**May 31, 2002 - Twinsburg, Ohio** - Mustang Dynamometer today announced that it has been awarded a contract to supply four complete dynamometer systems to General Motor's Electro-Motive Division. The new test systems are a part of GM EMD's plans to upgrade and expand the present testing facilities within their LaGrange, Illinois manufacturing and rebuild plant.

Under the terms of the agreement, Mustang is to supply all equipment and engineering requirements including system design, installation assistance and training for three high power and one low power water cooled, AC electric dynamometer systems. The new test systems will be installed in late 2002 and will begin testing in early 2003.

GM Electro-Motive is the world's largest builder of diesel-electric locomotives. A diesel-electric locomotive uses a large diesel engine to drive a generator set located in the engine top section. The generator set is connected to multiple electric AC or DC drive motors which in turn drive the train's wheels. The three high power dynamometers that Mustang will be supplying will be used for testing these diesel-driven electric drive.

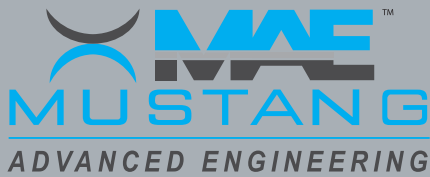


Each of the three high power systems will consist of an oil-cooled, AC motor dyne rated at 1,200 horsepower and 14,000 ft-lb torque at speeds up to 4,000 rpm. A shaft mounted, 225,000 in-lb rotating torque disk with 675,000 in-lb of overload capability will be incorporated for torque measurement. The low power test system will be used for testing the alternators, which are attached to the generators and supply the train with electrical power for operations and controls. The low power test system will utilize a variable speed AC motor dyne rated at 133 horsepower from 2,000 to 4,500 rpm and 350 ft-lbs of torque at speeds up to 2,000 rpm.

"Mustang's knowledge and experience with high speed/high power test systems combined with our reputation for high quality and innovative designs made us the clear choice as GM's preferred supplier" said Donald Ganzhorn, Executive Vice President and Chief Engineer for Mustang Dynamometer.

"We look forward to continuing our ongoing relationship with GM," said Dean Ganzhorn, Mustang President and CEO. "This new project with GM Electro-Motive will advance the technology and be a showcase project for both GM and Mustang."

GM EMD is the world's largest builder of diesel-electric locomotives for all commercial railroad applications: intercity passenger, commuter, freight, switching, industrial and mining. The company's headquarters, engineering facilities and parts-manufacturing operations are located in LaGrange, Illinois. Final assembly is conducted at EMD's state-of-the-art plant at London, Ontario, from which EMD products are exported to customers around the world.



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## About MAE

Mustang Advanced Engineering is a unique company whose expertise in the design and construction of custom test benches rivals just about any other company in the world. While custom chassis dynamometer systems have always been a large part of its core business, MAE has added a wide variety of products and has gained industry-leading expertise in nearly all types of dynamometer test benches including AC and eddy current engine dynamometer systems, transmission test benches, tow dynamometers and custom test benches of all types and sizes. The current MAE product range includes engine test cells, transmission test cells, custom chassis dynamometers, production and in-process test systems, containerized test cells and complete powertrain test cells up to and including truly colossal 8 x 8 chassis dynamometer systems.

MAE is fortunate to possess very sophisticated engineering capabilities and talents that have developed over many years of doing business in the automotive, industrial and aerospace industries. While some of the engineering MAE does for clients is done on a consulting basis, what MAE truly does best is the design and construction of custom, turn-key testing systems. As a result, MAE has positioned itself as the supplier of choice when it comes to most types of custom dynamometers and test benches.

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).

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