



FOUR QUADRANT DYNAMOMETER CUSTOMIZED TEST SYSTEM

MAGTROL DESIGNED THIS CUSTOM MOTOR TEST SYSTEM FOR TESTING AUTOMOTIVE BRUSHLESS MOTOR AND DRIVE SOLUTIONS USED IN AUTOMATIC TRANSMISSION ACTUATION.

This system is equipped with a TM 308 Torque Transducer, DSP7000 High-Speed Programmable Controller, power analyzer, DC power supply, rack mounted PC, emergency stop assembly, Mitsubishi Motor System, and a Thermo-tron Test Chamber. A custom 80/20 platform allows the test bench to be raised to test chamber height using the supplied lift truck. The system was designed to aid the customer in the development of drive algorithm, quantifying motor performance and validating scenarios observed "in vehicle" within a controlled environment. Data can be collected through both ambient lab tests and the climate chamber controlled environment (both temperature and humidity regulated).

Applications for the system include:

- Parametric motor performance curve generation
- Closed loop control over discrete load points
- Transient torque and speed control up to 40Hz.
- Closed loop manual load regulation for use in motor drive tuning

Easy to use, Magtrol M-Test Software enables the user to quickly set test parameters and sequences in torque or speed control, curve mode, closed loop or open loop. Test setups can be saved and recalled any time. It allows the acquisition of complete testing data (torque, speed, current, efficiency, power input, power output, temperature, resistance), temperature rise and related data during motor operation.

M-TEST has the flexibility to test a variety of motors in a multitude of configurations. The data generated from this user-friendly program can be stored, displayed and printed in tabular, graphical formats or universal data reports and is easily imported into a spreadsheet. Clear and professional reports can be issued.

Need specific
Motor Testing ?
Do not hesitate
to challenge us !

