

Automating electric-motor test stands

Dear customers and interested parties, Our latest newsletter presents an interesting application from the area of testing and automation. Research and development requires test-stand systems to optimise products regarding safety, durability, deployment conditions as well as their compliance to standards and regulations.

Production requires end-of-line testing to ensure product quality.

We support you in these areas by meeting your test stand requirements.



Electric-motor test stands

Test stands for motors are required during developmental phases, in serial testing and in endurance trials. Measurements during the developmental phase are fully automated whenever possible. These are used to check the electrical and mechanical properties of the test samples as well as temperature patterns and overload operation.

Test samples and products generally have highly diverging requirements and must be adapted to customer needs. To fulfil such tasks, the modular ProfiMessage devices and the ProfiSignal software provide an ideal basis.

Practical example

In a type testing system, explosion-protected motors are tested at five independent stations during the developmental phase. A full test run can be made up of multiple, mainly automated, sub-tests. ProfiMessage devices record data, manage the test stands, and are responsible for all test-voltage management. Delphin Message hardware control all relay matrixes and frequency converters as well as ventilation requirements. The devices exchange information directly with each other and require no PC support. Secure and problem-free processing is assured through control redundancy.



Application features

- Easy-to-use, automated testing procedures
- Test sample conditioning management, voltage supply, frequency converters and switch matrixes
- Time-synchronised temperatures, pressures, rotations, electrical measurements, and torques
- Precision electrical measurement via power measurement unit
- Online monitoring of limit values during the testing procedure
- Office compatibility, data and graphic export, SQL and ODBC interfaces

We have many years of experience and expertise to support you from the initial consultancy through to complete development and implementation of your test stand tasks. Set us a challenge.

Kind regards

Delphin Technology AG

www.Metronic.dk