Eliminate Unplanned Downtime and Maximize Throughput

**Festo Diagnostics**

Continuous monitoring and diagnosis of your pneumatic system, using real-time notification of component issues, the moment they deviate from normal, allow you to return your system to optimum performance and save downtime by up to 35%. Festo Diagnostics lets you schedule repairs according to your plant schedule and not due to equipment failure. Through early recognition of failing parts a repair can be scheduled outside of main production times in contrast to component failure causing downtime. An investment of 10% more could result in a savings of 75% on the follow-up costs when designing your system by planning with foresight and taking diagnostic and condition monitoring features into account. Certainly an interesting argument for OEM’s.

Great for End-Users too: It is often possible to retrofit existing systems.

Say goodbye to unscheduled downtime and high maintenance costs:
- Increase your productivity
- Reduce system lifecycle costs
- Increase your competitiveness
- Make use of remote diagnostics

In short, Festo Diagnostics allows you to maintain peak performance of your machines by early recognition of an upcoming failure. Maintenance does not need a set schedule anymore. Festo Diagnostics will tell you when a machine needs maintenance. Interval scheduled maintenance is yesterday, Festo Diagnostics is the future.

For more information: [www.festo.com/us/diagnostics](http://www.festo.com/us/diagnostics)
Optimize Production with Festo Diagnostics

Concept
Based on customer demand regarding problem areas to be diagnosed, sensors are deployed across the pneumatic system. The information collected from these analog and digital sensors is fed to the Festo CPX-FEC electro-pneumatic programmable logic controller, which not only performs machine control functions but also runs custom pre-programmed diagnostic algorithms to process this data and display the results on an operator panel or a laptop running SCADA software. A touch-screen lets the user configure thresholds, which generate warnings/alarms when thresholds are violated.

In Addition to System Diagnostics, customers can take advantage of additional Field-device diagnostic tools like the Handheld CPX-HMI which helps diagnose the control unit itself or the web monitor which offers remote diagnostics of the control unit via Ethernet in a standard web browser, with no added programming.

Sample List of Functionalities

System Diagnostics
- Analog signal monitoring with multiple threshold settings and detection.
- Time of actuator travel with multiple threshold detection.
- Time of valve switching with multiple threshold detection.
- Counting of actuator strokes and valve switches.
- Computation of air consumption based on cycle time or event timers.

Field Device Diagnostics
- Under-voltage identification for I/O and valves.
- Short circuit detection for sensors, outputs and valves.
- Open circuit detection for a missing solenoid coil
- Module/channel/valve specific diagnosis
- FieldBus communication status.

General
- Emailing functionality from the PLC to a mobile or hand-held in case of threshold violations.
- Controller interface via a web browser over the Internet/Intranet via a plug-and-play solution needing no JAVA/HTML programming
- Many more upon customer demand...

The Package
Constant monitoring of system diagnostic information keeps machines running efficiently and prevents unforeseen catastrophic failures resulting in unwanted downtime. Custom diagnostics packages offered by Festo include all components to do just that including, analog and digital sensors, programmable logic controller, and display options to complement your industrial automation components. Diagnostic packages can be obtained in the form of turn-key solutions or as add-ons to existing control solutions as per customer demands.

Festo Corporation
For ordering assistance, or to find your nearest Festo Distributor,
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