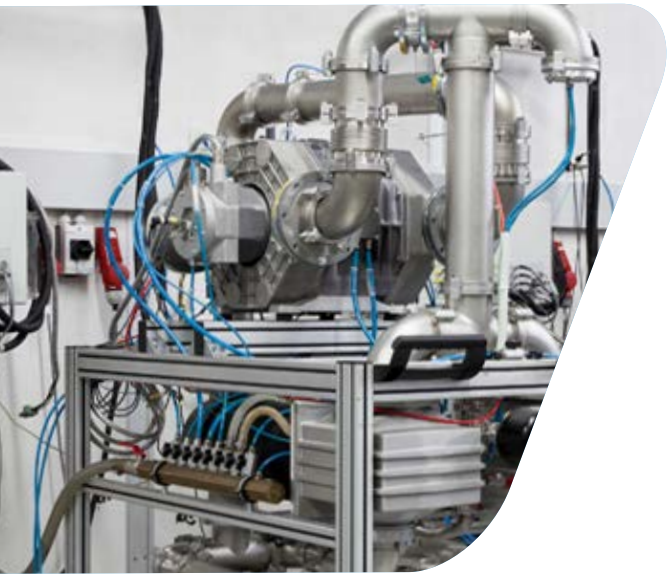
APPLICATION NOTE

CAS DATALOGGERS

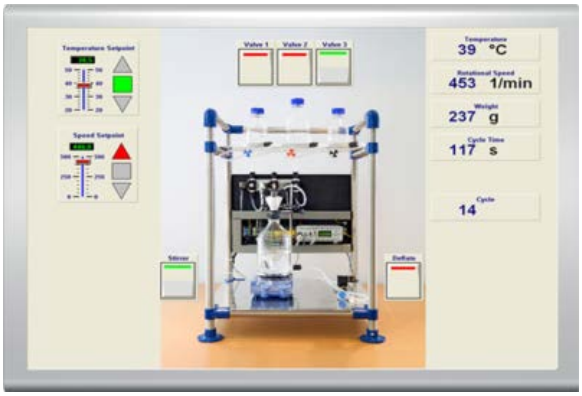
Sequential Process Control Via Intuitive, Automated Systems

Delphin Control Systems Enable Custom Programming



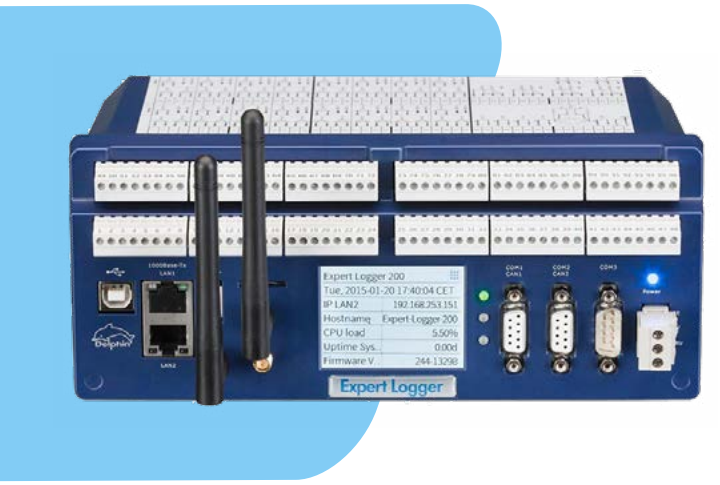
Process control systems are used primarily in laboratories, at universities and in industrial research and development departments. For example, manufacturers rely on temperature profiles to test household appliances using sequential process control. Meanwhile, laboratory users require a high level of system flexibility and fast response times. All these needs exclude the use of conventional PLC systems.

By using Delphin's ProfiSignal Klicks intuitive programming language and 'sequencer' module, users can create their own process control programs without having to learn how to program on their own. Laboratory engineers are then able to automate their own experiments. The created process program is easy to comprehend, amend and maintain. For accurate data measurement, Delphin hardware is equipped with measurement inputs and analog and digital outputs.



Application Features

- Intuitive creation of a process control program though “programming by selection”
- Test procedures or process steps managed by sequencing control
- Users can create, modify and save recipes using a sequencer
- Predefined components for parameter input, recipe input and program procedures
- Dynamic reports include header data, measurement data and evaluated data
- Data export into Excel, graphics export into Word by mouse-clicking



Customer Example

A university involved in polymer synthesis uses Delphin Message devices and ProfiSignal software for carrying out its research. This customer has six reactors along with ancillary equipment (such as dosage pumps and thermostats) which are controlled using Message hardware. The six systems function independently from each other. Now experiments can be set up, started and analyzed from a PC workstation. Process control is created using the Klicks automation software.

Software channels integrated into the Message devices function independently from PCs. These channels monitor the entire experiment and ensure that the experimental setup remains stable even in the event of a PC or connection failure.

Typical Areas of Application

- Provision of set point profiles in climate chambers
- Stimulation of test samples
- Test programs for machines in laboratories
- Automated testing on heating systems according to set standards
- Experiments in chemical and pharmaceutical laboratories
- Quality assurance of controllers and switches in household appliances
- Environmental and endurance testing on vehicle components

Delphin Control Systems

At CAS DataLoggers we offer innovative data acquisition and control systems from Delphin Technology. Manufactured in Germany, Delphin data loggers feature flexible programming and communications capabilities for use in practically every industry. Our own inside engineering department can also supply portable systems powered by battery or external power supply.

Delphin offers several products and software versions to suit your exact application:

- Expert Devices for flexible measurement;
- Message devices for industrial measurement data acquisition;
- ProfiSignal software for the automation of testing benches;
- Remote monitoring of plant and machinery using the ProfiSignal Go version

For more information on Data Acquisition and Control Systems, sequential process control or to find the ideal solution for your application-specific needs, contact a CAS DataLogger Application Specialist at **(800) 956-4437** or www.DataLoggerInc.com.