Above all, industrial manufacturing processes in factories and plants must function smoothly. Downtimes for these continuous processes have to be minimized to avoid the resulting costs involved. Consequently, process monitoring is essential for error-free products and for maintaining the required quality standards.

Delphin ProfiMessage and Expert devices are single solutions for automating monitoring tasks of industrial manufacturing processes. Delphin systems are ideal due to their combination of analog and digital inputs and their capability to acquire process data via PROFIBUS, ModBus and OPC. Here North American distributor CAS DataLoggers outlines common Delphin applications and features.
Typical Delphin Uses

Delphin data acquisition systems can directly record and report limit value violations without having to rely on a PC. Limit value violations can also be displayed in an alarm list. Meanwhile, data can be permanently and securely recorded to a Delphin ProfiSignal database.

Typical process monitoring applications include:

• Process monitoring and alarm functions in refineries
• Process data acquisition in steelworks
• Monitoring of cold storage and warehousing facilities for fruit and vegetables
• Process data acquisition in experimental rigs for the production of chlorine gas
• BDE and consumption data acquisition in printing machines
• Automated monitoring of ovens and firing systems
• Monitoring of welding parameters and soldering machines
• Acquisition and monitoring of wire-drawing processes

Real-World Example

A manufacturer of piezoceramics currently monitors its firing processes using Delphin Message devices and ProfiSignal software. The recording of the firing process for each oven and batch starts automatically as soon as a threshold temperature of 212°F (100°C) is reached.

A three-part view shows each oven’s status and gives users quick access to detailed information about each individual oven. An online trend is also displayed for each firing process. All data is archived by batch to a server. Recording and monitoring stop as soon as temperatures drop to below 194°F (90°C). Access to batch protocols can be made from any workstation.
Standalone Acquisition & Monitoring

The dataTaker data logger was used to record Temperatures, Airflow, pH and Pressures at the plant. Pressure recording is a vital element here owing to the plant’s pneumatic control systems.

- Independent acquisition and monitoring of a large number of input channels
- PROFIBUS, ModBus and OPC interfaces
- Alarm database with lists of alarms and events
- Fault reporting via email, text messaging and switch outputs
- DataService databases for continuous and/or batch recording

For more info on the Delphin Data Loggers, industrial manufacturing processes 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.