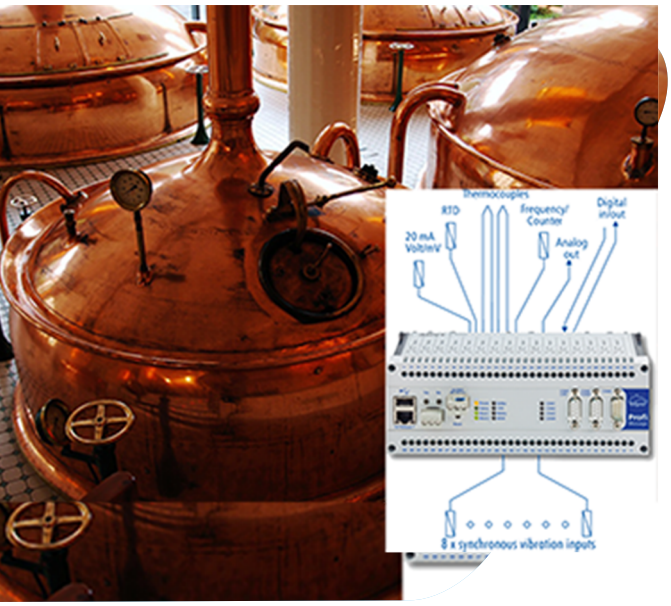
APPLICATION NOTE

CAS DATALOGGERS

Brewing Plant Process Control Monitoring Made Effortless

Large Brewery Tests a New Plant Process Control Monitoring System



CAS DataLoggers services one of the world's largest brewing companies with a brewing Plant Process Control Monitoring system. The organization operates a brewing plant located in Eastern Europe, which produces about 600,000 liters of beer destined for export markets in the USA, Russia, Sweden, and Norway. The plant's profitable daily operations demand constant, organized tracking of vital parameters such as energy usage, pressure, carbon dioxide levels in the tanks, as well as steam and freshwater flow volumes. Plant management realized the need for an easily configurable, real-time Plant Process Control Monitoring system complete with reporting capabilities. CAS Solution Analysts recommended the installation of an advanced Delphin LogMessage LM5000 data logging system to closely monitor the data and ensure a quality product.

Installation

This production plant now incorporates a Delphin LogMessage LM5000 system in its control cabinet, featuring 10 universal analog inputs along with 11 digital and counter inputs.

The vital advantage of this high-speed device is that one comprehensive system now performs all needed measurements, monitoring, and alarm management functions, all while sampling at a high rate of 600 Hz. The internal logger memory records up to 128 million data points with a 1GB memory capacity, and easily stores the process data for all backup functions. The live data is also archived in the DataService Configurator's database. LogMessage devices also support many serial interfaces (RS232, 485, 422), and the plant's 2 Siemens MAG 8000 flow meters have been interfaced via Modbus RTU protocol.

Benefits

The brewery began to realize immediate benefits after the installation of the new data monitoring system. The LogMessage LM5000's universal analog and digital inputs easily recorded all analog 4-20 mA signals from steam, CO2, and sewage flow meters, as well as recorded digital inputs from the energy meter's pulse output. All Modbus registers are stored via the LogMessage's 2 serial COM ports. The internal calculation channels are used to calculate key consumption indicators; for example, the integrator channel is now used to totalize the electrical energy and CO2 consumption of the carbonization process. Live readings are processed and analyzed from these indicators for centralized alarm monitoring.

Additionally, employees have made full use of Delphin's ProfiSignal Klicks software application to monitor the live data during the brewing process, directly from a PC providing them with a complete task overview. ProfiSignal Klicks generates detailed reports and statistics documenting the plant's entire production, as well as organizing tasks parallel to each other, such as the operation of brewing tanks and stirrers.

The necessary graphical user interface was easily developed with ProfiSignal Klicks.

As a result of installing one LogMessage LM5000 system to handle its daily operations, this successful brewing company has now maximized its efficiency and conveniently centralized all data acquisition.

For more information on data acquisition and control or manufacturing Plant Process Control Monitoring applications, or to find the ideal solution for your application-specific needs, contact a CAS DataLogger Application Specialist at **(800) 956-4437** or request more information.