

"Strip Chart Recorders: A Thing of the Past?"



Since the early 1900`s, companies have recorded process variables such as pH, conductivity, temperature, pressure, and other parameters on strip chart recorders. The purpose of the recorder was to create a permanent record which could be used to provide operator interface, analyze process conditions, initiate control parameter changes and indicate excessive excursion of the process variables. Strip chart recorders, other wise known as paper pullers, have undergone drastic improvements in versatility and flexibility as the information revolution has advanced. Strip chart recorders today not only record data, many also have manipulation/computation functions readily available.

A modern option to the strip chart can be referred to as a data acquisition system (DAS). Decisions can be based on the information in the data base of the DAS system, rather than reams of paper from strip chart recorders. A complete data acquisition system usually consists of some type of input modules, a personal computer and software to display and manipulate data. Input modules could consist of input boards installed in open slots of the personal computer. RTUs, PLCs or other I/O devices accept signals from the transducer such as pH, conductivity, dissolved oxygen, and other measurements. Personal computers made for lab environment are readily available which include adequate memory for data storage and retrieval at various price ranges. User friendly software is available to perform trending, recording, and manipulation of data.

The current trend towards computer based data acquisition systems, rather than strip chart recorders, is being driven by several factors. First, more information is readily available from a computer data base, increasing the ability to analyze the data . Second, manning constraints have decreased the number of available personnel to analyze data and make decisions regarding reactive or proactive action. Lastly, data acquisition systems are generally more cost effective than strip chart recorders.

There are many variations of data acquisition systems available. Some are capable of combining data acquisition and control into a cost effective offering. In future issues we will discuss integrated data acquisition and control systems.

Sentry has designed and manufactured a variety of DAQ systems, including PLCs, RTUs and PC based I/O, and Sample Sentry automated sample conditioning modules. Full graphics and report generation including SPC (Statistical Process Control) on critical cycle chemistry parameters can be configured by our staff to meet your needs.

***Every Employee an Owner,
Every Customer a Commitment***

SENTRY EQUIPMENT CORP • PO Box 127 • Oconomowoc, WI 53066
Phone: 262.567.7256 • Fax: 262.567.4523 • **E-mail:** sales@sentry-equip.com