



MODERNIZED CREMATORIUM TEMPERATURE MONITORING PAPERLESS CHART RECORDER ELIMINATES PAPER AND PENS



For years, many companies have continued to use outdated technology such as paper chart recorders for measuring and recording data. A crematorium was still using paper and pens to record the temperatures and oxygen levels inside its crematory. Eventually, management came to CAS DataLoggers looking for a way to integrate newer, more innovative technology into their existing systems to improve both accuracy and data accessibility for crematorium temperature monitoring.

Meeting emissions standards was also a priority concern. The Clean Air Act (CAA) was enforced

in 1990 by the <u>U.S. Environmental Protection Agency</u> to protect and improve the air quality and stratospheric ozone layer – resulting in crematories being forced to comply with the CAA since they used large ovens that emitted pollutants into the atmosphere. Using older paper chart recorder technology made locating this information on the hard copy tedious and difficult to organize. After CAS reviewed the client's application and realized they were still relying on an old paper chart recorder, solution analysts showed them a more advanced device to meet their monitoring needs.







INSTALLATION

CAS DataLoggers configured and installed a <u>Brainchild Paperless Chart Recorder</u> in the crematory. This allowed operators to monitor the key temperature range from 1500°F – 2000°F and the oxygen levels, giving their process additional functionality. Paperless chart recording served as a more user-friendly solution with its interactive dialogue simplifying setup and operation procedures. Easily accessible function keys also allowed the user to scroll backward to review historical trends. Management made

use of the recorder's programmable alarms and messages to get instant notification of high levels of pollutants or other critical events.

USAGE

The Brainchild's built-in display allowed for clear review of the measured data on the 6.4" VGA Color LCD display with flexible screen configuration. The recorder offered a fast sampling rate within 200msec for all channels and high accuracy with up to 18 input channels for voltage, current, thermocouple or RTD. Six configurable I/O card slots were standard features included in the data monitoring equipment. All readings were saved on the device's internal memory with transfer to a removable SD memory card's 16GB space for archiving or transfer to a PC via Ethernet. Data retention was no longer a concern, specified at a minimum of 10 years with zero power data retention. Additionally, the Brainchild's standard Ethernet and optional RS-232/RS-422/RS485 communication enabled operators to access data on-site from a remote place via an Ethernet network.





BENEFITS

The customer reported immediate benefits after installation of the Brainchild. Over the 2-3-hour process necessary in cremating a body, they now possessed the ability to monitor the live data and store the information on the Brainchild itself or on any connected PC. From there, they could ensure the process was completed at the correct parameters and alerts would be sent out if the parameters exceeded unsafe emission levels. The Brainchild also entirely eliminated the need to search through large amounts of hard copy records to find earlier data to monitor when they had to cease operation due to high pollution rates. Paperless chart recording proved to be an effective stand-alone solution for data monitoring, recording and evaluating all of the crematorium's processes.

For more information on <u>Brainchild Paperless Chart Recorders</u>, crematorium temperature monitoring or to find the ideal solution for your application-specific needs, contact a CAS DataLogger Application Specialist at **(800) 956-4437** or <u>www.DataLoggerInc.com</u>.