

Application Note – Monitor and record gas detection at an international chemical plant

Customer Requirements

At an international chemical company, health and safety is an important consideration with gas detection high on the list of priorities. It was necessary to monitor and record hydrochloric acid gas levels and chlorine (CH₂) levels. There is also a need to monitor and record temperature at twenty different locations within the plant.

Equipment

dataTaker DT500
Channel Expansion Module
PC memory card
DeLogger™ 4

Sensors

CH₂, HCL, Temperature

Datataker Solution

One of the reasons for choosing the *dataTaker* DT500 was for its 30 analog channels. The logger also has a memory capacity to hold 13,500 readings, and with the installation of a standard memory card this was expanded to 330,000 readings. When taking readings with a memory card, the time between downloading data can be over a month.

The DT500 system measures levels of hydrochloric acid gas, which is produced when a standard chemical made by the company leaks to the atmosphere as fumes. Information on CH₂ levels must also be recorded, as chlorine is used as a raw material at the plant. The company's gas detection system is ultimately connected to a scrubber, designed for the effective removal of contaminants.

The monitoring of temperature changes are manually measured taken every ten minutes and are supported by automatic readings that are recorded by the logger every minute. As the plant requires careful control, temperature levels are taken at 20 different points to give an accurate picture of what is happening to the plant over a period of time.

The engineers stressed the importance of recording the information. In research applications, the ability to present accurate data is essential. For this purpose, information from the DT500 is downloaded to a PC where it can be processed through spreadsheets or displayed in the form of a graph.

If you need more detail on this application please contact joyce.reid@datataker.com.au

Datataker Pty Ltd - 7 Seismic Court Rowville Victoria 3178 Australia
Tel: 03 9764 8600 +61 3 9764 8600 Fax: 03 9764 8997 +61 3 9764 8997
E-mail: sales@datataker.com.au Web: www.datataker.com