Technology is a wonderful thing and one of its greatest gifts is the ability to make our lives easier, saving us time that we would have previously spent undertaking tasks manually. When it comes to business, new technology can really add value; not only by offering additional functionality aspects but by helping to reduce ongoing costs.

This can be seen looking at the evolution of any industry; and the portable gas detection industry is no exception. Portable gas detection has come a long way. In fact its metamorphosis can be likened to the evolution of the mobile phone, which started life as a large and cumbersome device only to evolve into the small, highly functional devices we see today

that do so much more than just allow you to make a call.

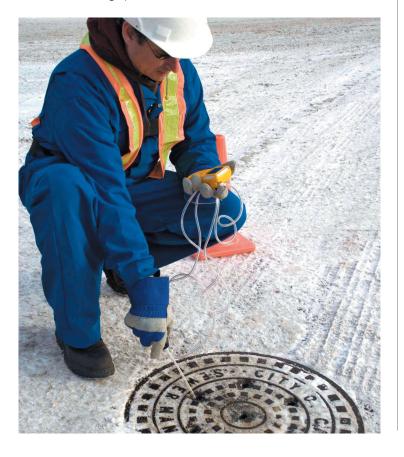
The technology boom of the 80s and 90s has helped to drive down essential component costs, affording gas detection suppliers the opportunity to develop competitive solutions with added value functionality. As a result, today's portable gas detection is small, unobtrusive and highly functional and capable of delivering aspects that make the device easier and quicker to use, thus helping to reduce training requirements and ongoing costs. Aspects like multi-gas capabilities, auto calibration functionality, automatic data logging and plug and play precalibrated sensors all help to potentially reduce the ongoing cost of gas detection - an attractive prospect for today's customer; particularly as businesses ride out the economic uncertainty catalysed by the banking crisis and subsequent global recession.

# Advances in Maintenance and Ongoing Care

There have been many revolutionary technologies that have positively impacted on the ongoing maintenance of portable units. For example, the emergence of plug and play pre-calibrated sensors, which have enabled operators to spend less time changing over sensor cartridges.

One of the latest innovations in portable gas detection not only helps to potentially deliver savings on the ongoing cost of gas detection; it can also dramatically improve site safety. This innovation is the emergence of portable gas detection docking stations that can automate aspects like bump testing, calibration of devices and automatic logging of data.

These devices range from portable auto calibration devices such as the Enforcer, from Honeywell Analytics, which can be used with the Impact range of portable multi-gas monitors to the modular MicroDockII docking station from BW Technologies by Honeywell that can be used with all the BW Technologies by Honeywell range of portable gas detectors, allowing up to 10 devices to be docked at a time.



# Bump Testing - The Simple Test that can mean the Difference Between Life and Death!

Imagine the following scenario; an engineer uses a portable device to undertake some sandblasting of rusted pipe work in a store room containing cleaning products and solvents at a manufacturing site.

The area he is working in poses a potential hazard for both flammable and toxic gases and his portable device uses catalytic bead detection to monitor for flammable gases. Whilst undertaking the sandblasting, his device is bombarded with minute particles, and some get forced into the sensor's sinter, partially blocking it. At the same time, particles of silicone in the air, which have leaked into the atmosphere from the cleaning products, pass through the sensor's sinter and into the catalytic bead sensor itself. The silicone reacts with the catalyst on the bead (Rhodium), leaving a coating on the bead that prevents its ability to work as a reduction catalyst, seriously compromising the device's monitoring capabilities.

Once he has completed this work he returns the device back to the store, leaving it ready for someone else to use. Another engineer picks up the device later that day and he assumes it is working well, but in reality its ability to detect flammable gases is severely compromised.

The ONLY way the engineer is going to be aware of this problem is to carry out a bump test before he uses the portable device. A bump test is a quick process where a portable gas detector is exposed to a known concentration of gas to check its response. When a device fails to alarm or takes longer than expected to alarm, it indicates a need to calibrate or service the device and ensures that it is capable of "seeing" gas and responding to it within pre-defined parameters.

# Bump Test and Calibration made easy

An automatic solution to bump testing and calibration can help sites to ensure that equipment is always ready to protect, that the gas amounts are controlled for bump testing and that data can be auto logged and backed up, when a device is docked.

A device like MicroDockII from BW Technologies by Honeywell is able to add dimensions, when combined with Fleet Manager II software. These include the generation of calibration certificates, reminders for managers and users of an upcoming need to calibrate a device and the automatic generation and dissemination of a range of reports.

In fact, as the name might suggest, the resulting combination of MicroDockll and Fleet Manager II is highly advantageous for on-site fleet managers or third party service providers because it is able to greatly reduce the time spent undertaking tasks such as reporting, whilst giving full visibility of an entire fleet at the touch of a button.

# Time is Money

Any time saved carrying out a job can equate to large cost savings over time. An automatic docking device like MicroDockII combined with Fleet Manager II can help to save time in a variety of ways. For example, a store manager can cut the time spent issuing a new portable device to an operator from about half an hour to just five minutes – with no paper trail or forms to be filled out. At a site issuing just one portable device per month, the manager would have saved 5 hrs carrying out this activity.

The actual bump testing and calibration of devices using an automatic docking station can also provide notable efficiencies for both sites and third party service providers. A portable unit can be clicked into the docking station in seconds, and the user has the option of carrying out three tasks; performing a bump test; performing a calibration; or carrying out a data transfer. Each of these activities can be performed with a single button press.

# **AUTHOR DETAILS**

Gemma Bayless
Communications Specialist
BW Technologies by Honeywell

Tel::+44 (0)1295 700300 Fax:+44 (0) 1202 678011

gemma.bayless@honeywell.com Web:

www.gasmonitors.com



The automatic generation of paper work such as fleet status reports and calibration certificates can also be greatly reduced with devices like MicroDockII when combined with Fleet Manager II software; data can be downloaded with a single button press and a few minutes wait using the device's data logging facility and this information can be easily converted into a variety of reports by using the intuitive software interface and a PC.

With a modular design and simple, but effective operation MicroDockII is the type of solution that will appeal to a wide range of businesses. When combined with Fleet Manager II software, it can help sites to enhance safety, reduce the ongoing cost of portable fleet maintenance and give instant visibility of fleet status. Third party service providers can also benefit greatly from using this product combination as it helps to maximise revenue potential by reducing the ongoing cost of product maintenance, whilst also creating additional value-added service opportunities such as the provision of fleet

Adding value is also increasingly important in today's market place as suppliers and service providers fight to gain market share and differentiate from the competition. The combination of MicroDockII and Fleet Manager II can help service providers add more value to their service by giving them data on fleet use and status, facilitating better client advice and guidance.

# The Perfect Solution for

## **On-Site Fleet Management**

Some sites like to have control of fleet maintenance on-site and, in this instance, MicroDockII combined with Fleet Manager II software can not only deliver potential cost savings but help to increase site safety:

#### Enhance your safety with cost effective bump testing

- Guarantee to conform to the most advanced legislation
- Ensures device performance and provides worker safety

#### Provides one solution for your whole fleet

- Device works with all of BW Technologies by Honeywell's range of portable gas detectors
- Docking station can be expanded to feature up to ten units at a time

### Simplifies your fleet management

- Software provides one single interface solution to a whole portable fleet
- Calibration certificate auto generation
- Flexible automated reminders for need to calibrate can be sent to multiple recipients
- Report generation in minutes with a simple mouse click

#### Saves you time and saves you money

- Provides simple and cost effective bump testing
- · Reduces calibration time
- Helps you reduce the time spent carrying out fleet management activities
- Minimises training through simple operation, and intuitive software interface

#### Provides you with an on-site solution when you need one

• Ideal solution for applications that need to keep fleets on-site due to risk of contamination or other factors, i.e. Nuclear industry

### The Perfect Solution for **Third Party Service Providers**

Third party service providers can benefit greatly from the use of MicroDockII combined with Fleet Manager II software; profits can be maximised, new revenue streams can be created and more value can be added to the customer experience.

#### Helps you increase your maintenance revenue

- Automatic email reminders for calibration provide additional service opportunities
- Helps to create additional value-added service opportunities through the provision of asset management services and aspects like automatic email reminders for calibration
- Add value to your service and keep your customers loyal with detailed analysis that helps you provide better advice and support
- Customisable reporting allows you to use your own logo

#### Provides your customers with additional safety

- Device can be configured for just bump testing allowing you to provide a solution that helps your customers stay safe
- Provides a simplified solution to on-site bump testing; customers need only press one button to carry out a bump test

# Saves you money and saves you time

- Reduces calibration time for fleets
- Helps you reduce the time spent carrying out fleet management activities
- Automatically generates reports
- Automatically send reports and calibration certificates to customers
- Saves you time on-site when using remote access software