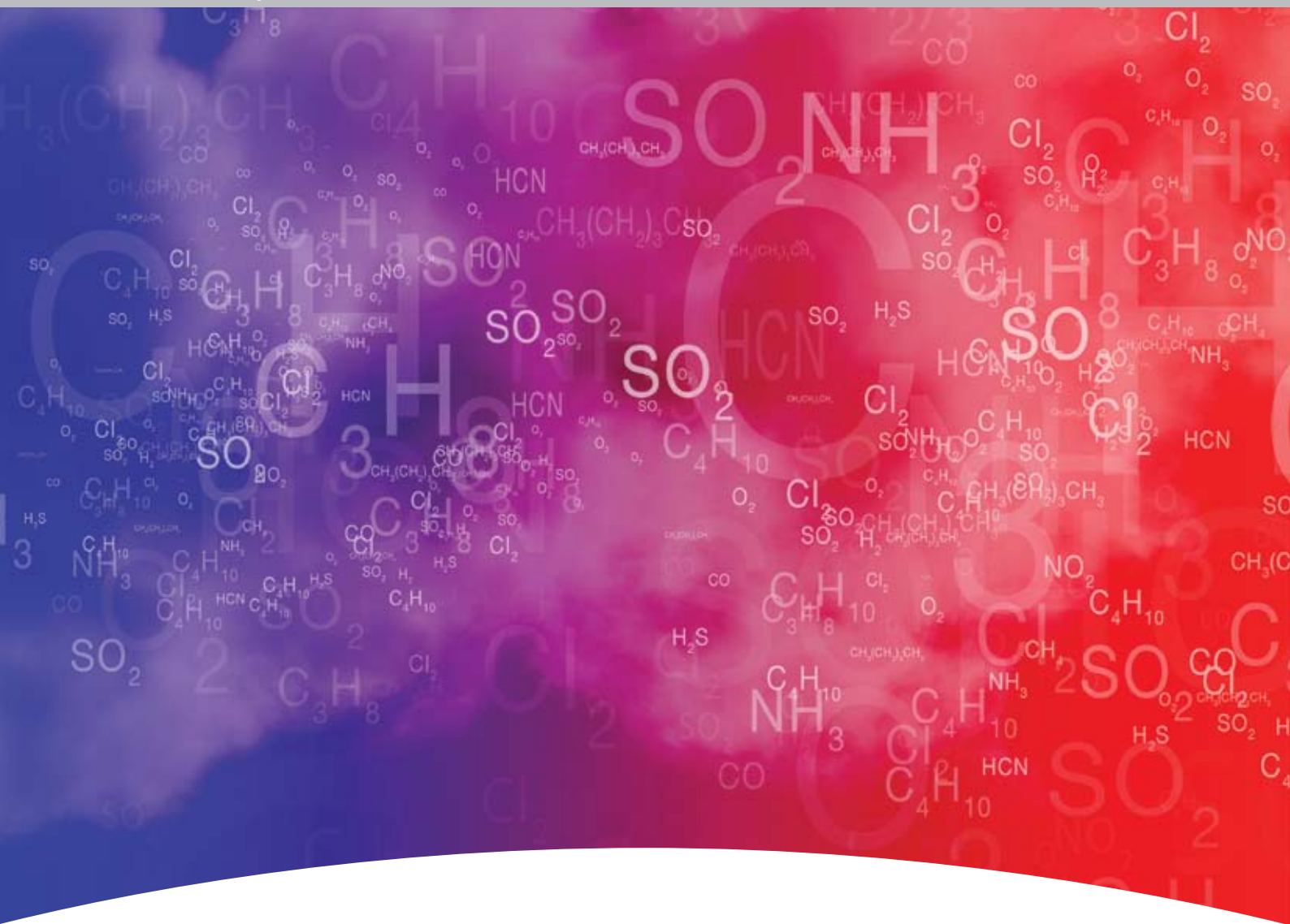


GasDetector

from the Experts in Gas Detection



This Issue:



Business in the Middle East

The oil industry has had a profound effect on the Middle East page 4

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Welcome

2009 is a year that has already challenged many businesses with investment plans and spending potentially compromised.

Safety of plant and personnel is an area where compromise is not acceptable and we at Honeywell remain dedicated and continue to invest in the safety culture of our own business and the products and services with which we protect our customers.

In this issue you will read about new products, extended service offerings, as well as tips for gas detection safety and management, to enhance the working environment and ensure the life safety of your people.

In a year when our business will be celebrating our 50th anniversary since Joshua Sieger founded the original Sieger company in Poole UK, we are proud to be operating Worldwide with a growing team in key regions such as the Middle East and India and working alongside a wide range of other Honeywell businesses, offering integrated solutions in many industries.

So I wish all of our friends and partners a productive second half of 2009 and commit our business to accept no compromise on safety.

Andi Thompson
Managing Director, Honeywell Analytics, EMEA

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For more information about the products and services offered by Honeywell Analytics, please visit our website:

www.honeywellanalytics.com

or contact us direct on **+41 (0) 44 943 4300**

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Email: gemma.bayless@honeywell.com
Direct line: **+44 (0)1202 645510**

Disclaimer

GasDetector Magazine is provided as a courtesy to our colleagues in the gas detection and life-safety community. While we make every attempt to ensure the accuracy of all information contained herein, product specifications are always subject to change. Under no circumstances should product or code information published in GasDetector magazine be considered a substitute for written instructions from the manufacturer or authority having jurisdiction. Always follow proper installation and maintenance practices, including carefully reading and understanding manufacturers' instructions before attempting to install, operate or maintain any life-safety equipment.

Honeywell Analytics
Experts in Gas Detection

News update

Middle Eastern Technical Support Centre Success

Since the launch of Honeywell Analytics' new Technical Support facility in Sanahiya, Abu Dhabi at the end of May last year, Middle Eastern customers are now better served than ever before. The team at the site has grown to include a Team Leader and additional experienced engineers to undertake field support and workshop repairs, meaning that Middle Eastern customers can now enjoy quicker turnarounds in terms of native field assistance and sending items to be repaired locally. **Mike Ross**, Leader of Technical Services (EMEA) at Honeywell Analytics comments on the impact to Middle Eastern business for the company. "Our growth in the Middle East over the last few years has catalysed the need for additional support for customers in this region. Since the site's launch last year, we have been able to respond to our Middle Eastern customers more quickly, turning round workshop repairs and field assistance requests with shorter lead times. Now our Middle Eastern customers can enjoy local support and don't have to send repair items very far, saving costs and time; the feedback we are getting and the additional growth we are seeing in this region indicates these changes are being well received."



It's Show Time!

2008 proved to be another successful year for company events, with Honeywell Analytics attending a large number of trade shows and exhibitions across Europe, the Middle East, Africa and India. Last year also saw the evolution of events from traditional trade show attendance to the inclusion of a programme of seminars in the Middle East and Russia.

Gail Hathaway, Events Manager (EMEA) for Honeywell Analytics, comments on last year's successes and the company's plans for 2009. "Our programme of shows helped us reach a wide audience during 2008, but the most impacting aspect of our activity last year was the inclusion of a programme of seminars; these invite-only events have provided us with the perfect platform to showcase our products and services as well as helping us to establish and strengthen our contacts and networks in growing regions. In light of the success of last year's seminars, we have planned a programme that includes both seminars and key exhibitions for 2009 in all regions."

If you would like to attend a seminar in your region to learn more about our products and services, please call us on: 00800 333 222 44 or email: gasdetection@honeywell.com

Introducing Expert Solutions

Further to our extended feature last year, highlighting the evolution of service and support at Honeywell Analytics, we are pleased to announce the official launch of Expert Solutions. Extended information about the new Expert Solutions offering can be found in our feature on page 9 in this issue of GasDetector. If you would like to receive a copy of our new brochure, which provides information on our full range of services and support options, please email gasdetection@honeywell.com.



Honeywell Analytics contributes to Italian Museum Exhibit

We are pleased to announce that Honeywell Analytics has donated equipment and provided expertise relating to a new museum exhibit at the Leonardo da Vinci National Museum of Science and Technology, in Milan, Italy.

The new interactive exhibit, dedicated to oil, has been created in partnership with Total Italia and features technical contributions from major companies including Honeywell Analytics. Visitors to the new exhibit can learn about the oil industry and the products used to facilitate the extraction and production of oil, including a close-up look at equipment like gas detection systems.

Giuseppe Bonetti, Regional Sales Manager for Italy at Honeywell Analytics, comments on the company's involvement in the project. "As the definitive experts in gas detection, we are delighted to have donated equipment and provided technical expertise for the new oil exhibit so that visitors can learn more about the industry in general and the importance of gas detection equipment. As one of the market-leading manufacturers of benchmark solutions, and the premier provider of solutions to the oil and gas industries, we are pleased to have the opportunity to help the museum to raise the profile of the oil industry so that future visitors can understand and learn more about this complex subject."



Business in the Middle East

The Middle East is a region that is strongly associated with oil extraction and refinement, producing over 66% of the World's oil; 19.8 billion barrels per year.

The impact the oil industry has had on the Middle East has been profound; it has catalysed not only a boom in construction and industry but also tourism and media, making the Middle East a growth market of large and diverse proportions.

Developing the Market Potential

Honeywell Analytics is currently undertaking a high level of activity in the Middle Eastern territories; in 2007 the company appointed Afzal Khan as Middle Eastern Regional Sales Manager to help develop market potential. Since his appointment, Afzal has built up an expert sales and engineering team and developed existing infrastructures with great success. "One of my key focuses in developing the Middle Eastern territories has been building a stronger sales and service infrastructure and also developing existing distributor networks. Over the past couple of years, the company has grown in terms of both sales and service support; from one Regional Sales Office with one head count, growing to include an additional Regional Service Centre in Abu Dhabi

with skilled engineers. Now that we have the correct resources in place, we have been actively promoting the company with a number of marketing initiatives and events to help raise our profile." One of the main marketing activities for Afzal and his team has been raising profile via the attendance of trade shows and also the organisation of a series of seminars showcasing the company's products and services. "Last year we attended more shows than ever; we attended the Sabic show in Al Jubail in April, both MEP and MOC in May and ADIPEC in November making some excellent contacts and allowing us the opportunity to showcase our offering. We also organised a programme of seminars in Oman and Saudi Arabia to showcase our products and services, which have proved to be very successful with over 100 attendees at most events. In light of this, we have planned an extended programme of seminars for 2009, and invited people who are

interested in learning more about Honeywell Analytics to contact us for details of upcoming events in their area."

Further Opportunities in the Middle East

When talking of the opportunities in the Middle East, Afzal explains why Honeywell Analytics is ideally suited to fulfil the gas detection needs of companies in these territories. "Aside from the infrastructure we can offer, we also have a range of market-leading gas sensors, such as the Surecell for toxic gas detection, optimised for performance in areas that experience temperature and humidity extremes. Our product range also includes a selection of market-leading optical infrared detection solutions in portable, Point and Open Path varieties, a diverse array of products with high functionality as well as low-cost options available. In fact, our product range is ideally suited to Middle Eastern applications and the challenges they face." When talking further on how he plans to develop business in the Middle East, Afzal explains the importance of both visibility and being close to the customer.

"My foremost focus as a Regional Sales Manager is to develop a strong, competitive and efficient group, keeping in mind the importance of both visibility and being close to the customer. The sales and engineering resource that we now have in place is enabling us to reach more customers and companies, which in turn is helping us to raise the profile of our brand and the positive perception of our products in these territories." And with a 30% upturn in Middle Eastern Sales, since Afzal joined the company, it looks as though the recent changes and developments are having a very positive result within the marketplace.

For more information, please contact Afzal Khan: on **+971-508116469** or email **afzal.khan@honeywell.com**



Gas focus

Ammonia

Gas Overview

Ammonia is a compound with the formula NH_3 . It is normally encountered as a gas with a characteristic pungent odour. Although Ammonia contributes significantly to the nutritional needs of the earth, the gas itself is caustic and can cause serious damage to health. Commercially used Ammonia is usually called Anhydrous Ammonia; this term emphasises the absence of water. NH_3 boils at -33°C and the liquid must be stored under pressure or at low temperatures. However, the vaporisation heat is sufficiently high that NH_3 can be handled in ordinary beakers in a fume hood.

The effects of Ammonia on organic life

Exposure to naturally occurring Ammonia in the air does not cause any harm. Exposure to higher levels of Ammonia (from inhaling fumes, absorption through the skin or from consumption), can result in burns to the skin, throat, lungs and eyes. Exposure at very high levels can result in death.

Industrial applications using Ammonia

The main uses of Ammonia are in the production of fertilisers, explosives, synthesis of organonitrogen compounds and refrigeration. Because of its many uses, Ammonia is one of the most highly produced inorganic chemicals. Dozens of chemical plants Worldwide produce Ammonia; in fact the Worldwide Ammonia production in 2004 was 109 million metric tonnes. About 80% or more of the Ammonia produced is used for fertilising agricultural crops.

Ammonia is used in the manufacture of Nitric Acid, certain alkalies such as soda ash and dyes; pharmaceuticals such as sulpha drugs,

vitamins and cosmetics; synthetic textile fibres such as nylon, rayon and acrylics and for the manufacture of certain plastics such as phenolics and polyurethanes. The pulp and paper industry uses Ammonia for pulping wood and as a casein dispersant in the coating of paper. Ammonia is used in several areas of water and waste water treatment, such as pH control, in solution form to regenerate weak anion exchange resins; in conjunction with Chlorine to produce potable water and as an Oxygen scavenger in boiler water treatment. Ammonia is also used in Semiconductor fabrications in CVD processes to form nitride layers.

Ammonia			
Systematic Name	Ammonia, Azane		
Other Names	Hydrogen Nitride Spirit of Hartshorn Nitrosil Vaporole		
Molecular Formula	NH_3		
Appearance	Colourless gas with strong pungent odour		
CAS Number	7664-41-7		
Properties			
Vapour Density	0.59		
Melting Point	-77.73°C (195.42K)		
Boiling Point	-33.34°C (239.81K)		
Toxic Exposure Levels			
EH 40 Workplace Exposure Limit (WEL)			
Long-term exposure limit (8-hour TWA reference period)		Short-term exposure limit (15-minute TWA reference period)	
ppm	mg.m⁻³	ppm	mg.m⁻³
25	18	35	25
OSHA Permissible Exposure Limit (PEL)			
Long-term exposure limit (8-hour TWA reference period)			
ppm	mg.m⁻³		
50	35		
ACGIH Threshold Limit Value			
8-hour TWA workday and a 40-hour work week		25ppm	

Gas detection for Ammonia

Honeywell Analytics has a number of products optimised for the detection of Ammonia:



Apex

<http://www.honeywellanalytics.com/Products.aspx?elementId=375§ion=Overview>

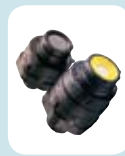
High performance flammable and toxic gas detector with over 40 detectable gases



Midas

<http://www.honeywellanalytics.com/Products.aspx?elementId=315§ion=Overview>

Extractive transmitter with sensor with over 40 detectable gases and Power over Ethernet (PoE) comms/power platform



Sensepoint

<http://www.honeywellanalytics.com/Products.aspx?elementId=375§ion=Overview>

ATEX certified Exd flammable, toxic and Oxygen detector with IP65/66 rating



Satellite XT

http://www.mst-technology.com/europe/europe_products/satxt/satxt_technical.htm

Continuous real-time monitoring of a wide range of toxic gases with low cost of ownership



Signalpoint

<http://www.honeywellanalytics.com/Products.aspx?elementId=375§ion=Overview>

ATEX certified flammable, toxic and Oxygen gas detector with IP54 enclosure for non-aggressive environments



SPM

<http://www.honeywellanalytics.com/Products.aspx?elementId=384§ion=Overview>

Single Point Monitor customised for harsh industrial environments with sensitivity to ppm/ppb



Vertex

<http://www.honeywellanalytics.com/Products.aspx?elementId=383§ion=Overview>

Central monitoring system with up to 72 points of continuous gas detection with optional Chemcam camera



German team launches commercial fire detection services

There are a lot of similarities between gas and fire detection; both are safety systems which trigger similar alarms and, in many companies, the same person maintains both of these types of systems.

As an organisation that is focused on customer support and the provision of quality maintenance options, Honeywell Analytics now offers a new service for German customers, providing a dedicated team of engineers ready to undertake the servicing of both gas and fire detection systems in industrial and commercial buildings throughout Germany. Since its conception in 2008, the new Fire Detection Service has proved to be highly successful, gaining many customers.

Wolfgang Langoff, Service Manager for Central Europe, comments on the benefits of developing an engineering resource skilled in complementary disciplines, to meet market demand. "Fire detection is a part of most commercial buildings' safety systems and market research we have undertaken has highlighted a desire for a single fire and gas maintenance service. We decided to develop a multi-disciplined service team, bringing a new engineer on board in 2007; Benjamin Koestlin, who has a lot of experience in the servicing of fire systems working for brands such as Esser and Notifier. By using Benjamin's expertise, we have been able to develop our team, adding another dimension to our servicing capabilities, which has enabled us to deliver a better customer experience and helped us gain valuable new business." Wolfgang explains how a programme of training and working closely with fire detection brands within Honeywell has helped in establishing a strong and skilled resource for the new offering. "Synergies are a big part of our business ethos and being a part of a large organisation like Honeywell means that we have sister companies specialising in fire detection that we can work with. Through knowledge sharing, training initiatives and close associations with companies like Esser Novar and Notifier, we have been able to develop our resource so that we now have a team of six engineers spread throughout the German territories, qualified for fire detection maintenance."

Would you like YOUR BUSINESS to be featured in GasDetector?

Do you use our products in your application? If so, GasDetector wants to hear from you so we can feature your business in our new section on customer case studies. Not only is this a fantastic opportunity to promote your business for FREE to over 30,000 businesses across Europe, the Middle East, Africa and India, but featured applications will receive...

Top of the range MP3 player

For more information, or to request for your application to be featured in a future issue of GasDetector, please contact Gemma Bayless on 00 44 (0)1202 645510 or alternatively email: gemma.bayless@honeywell.com

What we are looking for...

- Unusual or niche applications
- Sites that have an interesting gas detection set up
- Sites that are detecting unusual gases
- Sites that have large all-encompassing safety systems with gas detection as an integrated element
- Sites that have recently retrofitted gas detection into an existing safety system



If you would like more information on the Fire and Gas Detection service for German customers, please contact us on free phone: **00800 333 222 44** or email gasdetection@honeywell.com.

Product feature



Signalpoint Pro is an Intrinsically Safe (IS) certified gas detector offering a low-cost solution for the detection of toxic and Oxygen gases in potentially explosive atmospheres.

The device detects toxic gases or Oxygen in an IS 2-wire 4-20mA format, making Signalpoint Pro ideal for retrofitting other 2-wire IS devices including the Sieger Series 2000 range of 2-wire IS toxic gas detectors.

Introducing Signalpoint Pro

A low-cost, intrinsically safe gas detector, optimised for the detection of toxic and Oxygen hazards in a wide range of indoor and outdoor locations.

This device offers excellent reliability and ease of use; Plug and Play smart gas sensors are automatically recognised when plugged into the detector and sensors can be accessed without needing to open the main terminal housing. This reduces down-time during sensor replacement procedures and minimises the impact of maintenance activities.

Signalpoint Pro offers excellent flexibility with the facility to adjust the detector's full scale gas range and span calibration points, making it ideally suited to a wide range of applications. The device can be operated and modified using a non-intrusive magnetically activated switch, permitting test routines and other setting changes without the need to open the enclosure or obtain a hot work permit.

In addition, on-board diagnostics provide fault and warning codes on the display that are invaluable when troubleshooting an installation.

The large terminal compartment of Signalpoint Pro includes a hinged cover to provide easy hands-free access for wiring. When opened, fixing points are revealed providing secure hidden mounting. A pre-formed M20 clearance cable entry is provided with a second easy knockout entry if required.

Signalpoint Pro is ATEX, UL and CSA certified. Detectable gases are Oxygen, Hydrogen Sulphide, Carbon Monoxide, Sulphur Dioxide, Ammonia, Nitrogen Dioxide and Hydrogen.



Application note

Pharmaceutical applications

There are reportedly over 22,000 pharmaceutical plants in the World producing a wide range of varied products. Pharmaceutical production, whether continuous or batch, uses a variety of toxic and combustible materials. Not all gases or solvents are used in each process, but the general categories include Amines, Ammonia, Carbon Monoxide, Carbon Dioxide, various Halogens, Chlorides, Hydrogen Peroxide, Hydrogen Sulphide, Hydrogen Cyanide, Phosgene and a variety of solvents.



Market Drivers

By streamlining the production process, maximising throughput and working within required safety standards, capital investment can be recouped more quickly; the use of gas detection equipment to monitor solvent emissions during operation can facilitate this. Local health and safety guidelines dictate safe working practices for personnel in connection with toxic substances. Failure to meet these minimum requirements exposes the operator to the risk of litigation. Emissions of solvents used within the production process must be minimised to meet latest international regulations on emissions. This requires significant investment in solvent reclamation equipment which must be protected. In addition, the use of continuous flammable gas monitoring will reduce insurance premiums further while ensuring safety levels are maintained.

Application Examples

We have provided three examples of typical pharmaceutical applications:

Application 1: Bulk Storage and Preparation

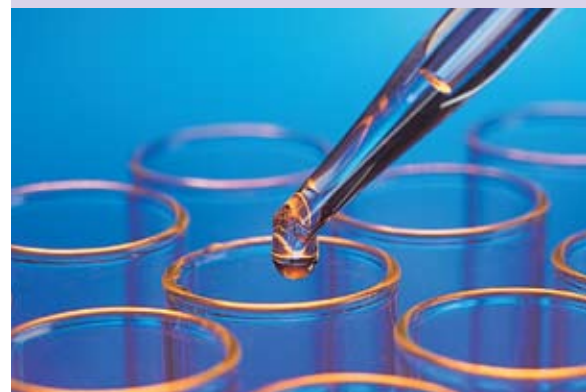
Solvents are both flammable and toxic. Bulk storage and preparation areas for production processes must be monitored for the build up of explosive atmospheres and dangers to personal health. Local fire regulations, as well as health and safety guidelines, must be followed. Typical equipment required will include infrared flammable gas detectors (point and open path) as well as flame and conventional smoke/fire detectors.

Application 2: Dryer and Oven Monitoring

As the printed material passes through the various stages of the dryer, solvent is evaporated through forced air ventilation and increasing temperatures. By controlling the speed the printed material passes through the oven, the temperature profile itself and also by monitoring the gas level, throughput is maximised, minimising production costs.

Application 3: Chemical Compounding and Synthesis

Drugs contain complex chemical compounds that do not naturally occur in large volumes. The manufacture of these chemicals requires solvents and other toxic compounds to be processed under increased temperature, pressure and humidity. The reactions that take place produce toxic bi-products and hazardous gaseous compounds that represent explosive hazards and danger to personnel through inhalation.



Typical Products suited to pharmaceutical applications

SPM Single Point Monitor

- Fast response monitor specific to target gas only
- Gas sensitivity to ppb levels with physical evidence
- Minimum maintenance and no dynamic calibration
- Customised for harsh industrial environments
- More than 50 gas calibrations available



Searchpoint Optima Plus

- Detects a wide range of Hydrocarbons
- Fail-to-safe operation
- Increased stability from self-compensating optics
- Fast speed of response
- Reduced routine maintenance
- Immune to catalytic poisons
- Long operating life
- Works in inert atmosphere



Satellite XT Transmitter with Sensor

- Wide range of toxic, corrosive and combustible gas sensors available
- Continuous real-time monitoring
- Low cost of ownership
- Interchangeable intelligent sensor cell
- No dynamic gas calibration required
- Generic sensor head electronics
- 4-20mA or LonWorks® interface (providing data logging)
- Optional built-in relay



For more information, please contact a member of the Sales Team today on: **+41 (0) 44 943 4300** or email **gasdetection@honeywell.com**.

Introducing Expert Solutions...



Global reach

Regional focus

A flexible range of support packages designed to meet your unique needs

We understand that businesses of today want the flexibility to create bespoke support packages that reflect their own specific needs. Our new range of Expert Solutions is designed to be fully customisable and all-encompassing, providing customers with more freedom to build a solution to suit their individual commercial requirements; from equipment maintenance to full end-to-end support.

We can help you with all aspects of servicing and support and we offer a wide range of services including:

Field Maintenance and Support

Rely on our Field Engineering Support to undertake all your maintenance needs

Preventative/Corrective Maintenance

Work smart and minimise downtime with planned expert engineering support

Dedicated On-Site Maintenance and Support

All the benefits of in-house support, none of the hassle

24/7 Emergency Call Out

Minimise the downtime of your equipment with our rapid response solution

Technical Support Centre

With a global network of service and repair facilities, local support is never far away

Mobile Calibration Service

Minimise downtime of equipment through our on-site portable equipment calibration service

Installation and Commissioning

Work with our Engineers to ensure that your equipment is installed and set up as quickly and easily as possible

Application Engineering

Giving the support you need to select the right system for your specific application

System Integration

Expert solutions for the integration of gas detection into existing equipment

Repair and Maintenance of Third Party Equipment

Total support of existing systems

Extended Product Warranties

Flexible warranty packages designed to deliver extra protection

Training

Learn from the Experts in Gas Detection

Site Evaluations

Expert guidance and support for evaluating existing systems

Pre-Installation Support

Expert support to help get you ready to receive your new equipment

Custom Drawings and CAD Designs

Flexible documentation and design service, optimised for bespoke projects

Installation Supervision

Let our Engineers assist your operatives with wiring and device operation

Factory Acceptance Testing (FAT)

A robust test service designed to enhance peace of mind

Project Management

Professional, flexible, expert management of your project

Why choose Honeywell Analytics Service and Support?

Aside from being the market-leading Experts in Gas Detection, we offer more resource, infrastructure and support. Here are just a few reasons why more and more businesses are choosing to work with Honeywell Analytics.

- Providers of flexible, adaptable solutions specifically designed to meet unique requirements
- Local business support with corporate backing
- Over a millennium of accumulative engineering expertise
- Regional focus, global reach
- All the benefits of in-house support, with none of the associated cost
- End to End Support – whatever you need, we've got you covered

Our new Service and Support brochure provides extended information on the full range of options offered by Honeywell Analytics. Contact us today to receive your copy.

For more detailed information about Expert Solutions, Technical Services or Additional Support options provided by Honeywell Analytics, please contact a Technical Services Expert today on **00800 333 222 44** or email **gasdetection@honeywell.com**

Ask the Experts

Although certain principles of gas detection require less maintenance than others, the calibration and servicing frequency of gas detection equipment is largely dependent on the environment and application where it is being used. Weather conditions, dust, dirt, water and even the types of compounds being used nearby can have an effect on the performance of equipment and influence the frequency of maintenance activities.

In addition to the impact of the device's use, the actual equipment design itself also plays an important part in ongoing maintenance requirements; for example, 'flameproof' equipment will use coarse sinters to enable gas to pass to the sensor, whereas optical devices can be designed "open to air", removing the possibility of sinters becoming blocked; this can reduce maintenance demands in 'dirty' environments. Equipment design itself is often driven by approvals and



certification requirements, meaning that a variety of factors must be taken into account when considering ongoing maintenance.

The following information provides a general guide to servicing equipment; please take into consideration additional factors and variables within your own application.

Catalytic Bead Devices

These types of device have a life of **5-7 years**. In poison-free environments, typical maintenance frequency is twice yearly and this has been extended to annually at those sites tracking historical adjustments. Catalytic beads are susceptible to poisoning from various compounds including Halogens (Cl_2 , F_2 , Br_2), low molecular weight Silicones and polymerising compounds such as Propylene Oxide and Ethylene Oxide. The presence of such inhibitors can severely limit the life of a catalytic bead and create the need for frequent bump testing/re-calibration on a **monthly or even bi-weekly** basis.



Exception to the rule

Cleaning Cupboard: An industrial cleaning cupboard may contain a build-up of Silicone as well as flammable gases from polishing products. Typical maintenance frequency is every **2 to 4 weeks**.

Electrochemical Cell Devices

These types of devices require regular gassing to ensure ongoing performance. Like catalytic bead devices, some ECCs can be poisoned by compounds such as alcohols and they can also react with electrolytes and catalysts; the most common mode of failure for this type of device is electrolyte/electrode contamination over time. ECCs have a life of **1-3 years**. Typical maintenance frequency is **6 months to once yearly**.

Exception to the rule

Plant producing Ethanol fuel (a bio-fuel alternative to gasoline):

In this type of application, the presence of Ethanol can compromise the life of some ECCs and inhibit their performance. Typical maintenance frequency is every **3-6 months**.

Metal Oxide Semiconductor Devices (MOS)

As with electrochemical cells, these types of devices need to be gassed regularly to ensure ongoing performance. The filter can become blocked in harsh environments due to ingress from dust, dirt and water. In their un-powered state these devices are susceptible to damage from moisture and their slow response to gas may vary excessively over time, demanding more regular attention. Typical maintenance frequency is every **3 months**.

Exception to the rule

Given the variation in output over a short time - sometimes as much as 10% per month - some sites with a high risk of exposure from target gases like H_2S , operate **monthly or bi-weekly** functional testing and calibration. Also in areas that experience lightning and possible outages of power, such as a refinery located in the Middle East, special care should be taken to ensure that in their un-powered state protective covers are fitted.



Disclaimer:

The information provided in this article is for guide purposes only. For more detailed information about the maintenance and servicing of equipment at your location, please contact an expert engineer today on: 00800 333 222 44



Point Infrared/ Open Path Infrared

Point IR and Open Path IR devices require less maintenance than other detection principles and have a life of **5 to 10 years**. Dual or even triple compensated optics provide additional stability, meaning that these types of devices only require re-calibration when a test indicates a gross deviation; typically every **3-5 years**. Regular performance tests should be undertaken (in line with site procedures), typically every **6-12 months**.

Exception to the rule (Point IR)
Sludge Pit on an Oil Platform: "Dirty optics" or beam obstructions are automatically



detected and indicated at control equipment. Such devices are designed to be typically fail-to-safe in nature. However, in a sludge pit excess dirt will build up on weatherproof baffles and need to be cleaned. Typical frequency could be **once a week** to ensure that the housings remain clear enabling gas to enter the optical chamber freely.

Exception to the rule (Open Path)

Open Path detectors are designed to operate in vibrating environments; for example, equipment may be mounted to superstructures (FPSO, well head production platforms etc), causing the device to experience vibrations routinely. Gross misalignment can result in reduced signal to noise, causing possible false alarms. Devices using 'coaxial optical alignment' (where a telescope is used to view the exact path taken by the infrared beam of light), optimise alignment to maximise signals and increase time between adjustments; sometimes as infrequently as **once every 3 years**.

Guidance on Equipment Maintenance

Check your sounders, beacons and alarms regularly!

As well as checking your gas detectors, it is also essential to ensure that your alarms and beacons are working properly; otherwise your detection system won't be able to alert you to an issue, should one arise. Water, dust and dirt can all affect the performance of these types of devices, so twice yearly checks are essential as a minimum.



Our Product Range



Fixed Gas Monitoring

Honeywell Analytics offers a wide range of fixed gas detection solutions for a diverse array of industries and applications including: Commercial properties, industrial applications, semiconductor manufacturers, energy plants and petrochemical sites.

- » Detection of flammable, oxygen and toxic gases (including exotics)
- » Innovative use of 4 core sensing technologies – paper tape, electrochemical cell, catalytic bead and infrared
- » Capability to detect down to Parts Per Billion (ppb) or Percent by Volume (%v/v)
- » Cost effective regulatory compliance solutions

Portable Gas Monitoring

When it comes to personal protection from gas hazards, Honeywell Analytics has a wide range of reliable solutions ideally suited for use in confined or enclosed spaces.

These include:

- » Detection of flammable, oxygen and toxic gases
- » Single gas personal monitors – worn by the individual
- » Multi-gas portable gas monitors – used for confined space entry and regulatory compliance
- » Multi-gas transportable monitors – used for temporary protection of area during site construction and maintenance activities

Technical Services

At Honeywell Analytics, we believe in the value of great service and customer care. Our key commitment is providing complete and total customer satisfaction. Here are just a few of the services we can offer:

- » Full technical support
- » Expert team on hand to answer questions and queries
- » Fully equipped workshops to ensure quick turnaround on repairs
- » Comprehensive service engineer network
- » Training on product use and maintenance
- » Mobile calibration service
- » Customised programmes of preventative/corrective maintenance
- » Extended warranties on products

Find out more

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