

# City Technology Celebrates 25 years of Sensoric Specialist Gas Sensing Innovation

Honeywell company, City Technology, a World leading manufacturer of gas sensors, is this year celebrating the 25th anniversary of its specialist gas sensing range, Sensoric.



“With a pioneering spirit and commitment to innovation, one of the keys to Sensoric’s sustained success over the last quarter of a century is the ability to meet complex application needs and create niche solutions. The development of small profile sensing technologies that set the benchmark for performance are key features of the Sensoric range, achieved through consistent investment and the application of best practice manufacturing processes.”



**John Warburton,**  
Strategic Marketing Manager  
City Technology  
Walton Road, Portsmouth  
Hampshire PO6 1SZ UK  
Tel: +44 (0) 23 9228 8100  
Email: john.warburton@citytech.com  
Web: www.citytech.com

City Technology’s Sensoric range, manufactured in Bonn, Germany, provides the most comprehensive specialist gas sensing portfolio available on the market. More than 180,000 sensors per annum are manufactured at the facility – detecting toxic and exotic gases such as ammonia, hydrides, fluorine, chlorine and ozone.

With a pioneering spirit and commitment to innovation, one of the keys to Sensoric’s sustained success over the last quarter of a century is the ability to meet complex application needs and create niche solutions, as City Technology’s Bonn Site Leader, Dr Andreas Koenig explains. “We excel at solving difficult operational challenges through the application of highly specialised technologies that increase accuracy, reliability and sensitivity, removing the obstacles faced by many challenging applications.

## Growing demands for Specialist Sensing

“The specialist gas sensing market is diverse in nature and has grown considerably since we began as an organisation. Besides the growing use of ammonia for refrigeration, the macro trends of increasing safety standards and evolving chemical regulations have led to a need for the more exotic gases like phosphine, diborane and hydrogen chloride. Applications and exact processes vary, creating their own challenges and this means that bespoke gas sensing solutions are often required to provide an exact fit. Since the early 1990s we put a key focus on designing niche products and today we offer 40 sensors detecting 20 different toxic and exotic gases, 60 variations of those cells and expert application support. Bespoke engineering has proved to be a real differentiator for us and this, combined with our advanced technology, has helped us maintain a strong and consistent double digit year-on-year growth.”

Continued innovation and the development of small profile sensing technologies that set the benchmark for performance are key features of the Sensoric range, achieved through consistent investment and the application of best practice manufacturing processes. After the range was introduced in 1990, Sensoric sensors soon became popular with the semiconductor industry through their ability to offer small profile, trace level monitoring

with enhanced reliability. This early success led to an expansion into the industrial safety market, and the development of drop-in sensor adaptations for existing instruments. Growth and market expansion soon sparked interest from major gas sensing player First Technology, who acquired the brand in 2004.

## Investment and Acquisition Proves a Success

In 2006 First Technology was acquired by the global manufacturing leader, Honeywell. Each acquisition brought with it investment and processes that helped evolve Sensoric into the market leader it is today, as Andreas continues. “Our initial success in the semiconductor industry enabled a quick expansion into industrial safety markets and customised sensor designs. This success and the acquisition by First Technology allowed us to grow and invest in areas like Lean manufacturing and automated sensor

manufacture, ensuring we could meet market needs for smaller, more ergonomic sensors with increased sensitivity and reliability. “Our integration into Honeywell provided further infrastructural support through enhanced sales, marketing, research & development and the application of Velocity Product Development (VPD) techniques. These developments strengthened our technological offering, infrastructure, in-house expertise and reach, as we continued to expand into new markets and regions. This investment has helped us create very strong scientific expertise; today we have several PhD level scientists in our organisation.”

## Enhanced Performance in Unique Applications

Today, Sensoric sensors are part of the City Technology gas sensing portfolio, serving a wide variety of specialist industries from ammonia refrigeration, gold and coal mining, biogas, emissions, hi-tech laboratories, semiconductor and photovoltaics to water treatment, pulp & paper processing and the chemical industry. Sensoric sensors are used in some of the World’s most



a range of Sensoric sensors



Sensoric sensor for the detection of ammonia

interesting and unusual applications; the EU Space Agency rocket fuel stores are currently monitored using Sensoric hydrazine sensors, as an example.

A strong market position and sustained growth will no doubt see the brand achieving consistent success for many years to come, supported by some exciting technological innovations in development. Dr Stefan Degen, City Technology's Research and Development Manager for Specialist Gas Sensors, recently delivered an innovation speaker session at the Sensor + Test 2015 exhibition on the latest developments. Dr Degen explains how City Technology will continue to shape the global gas sensing industry through the introduction of revolutionary "smart" technologies. "It's very interesting times for the gas sensing market. As highlighted in my innovation speaker session at Sensor + Test, we are developing smaller and smarter sensors, that will offer enhanced in-built intelligence, greater PPE integration potential and increased reliability, sensitivity and longevity. We are pioneering these technologies that will have a big impact on the global safety industry, providing users with increased safety, ease of use and added value."

### Driving the Origins of Sensoric into the Future

It is no surprise that Sensoric sensors should be at the forefront of such technology, building on its established success, as Dr Degen comments. "Back when we began in specialised gas sensing, we produced the industry's smallest profile toxic gas sensor, which was used in the MSTox portable gas detector. This ground-breaking device was incredibly popular in light of its small, ergonomic design and sensitive high performance monitoring capability. Our technology, especially the highly selective IP protected ammonia (US6248224B1) and hydrogen fluoride (US6423209B1) SE sensors, have been a key aspect of MSTox's success and our latest developments will no doubt allow instrument manufacturers to achieve similar success and differentiation in the future. I feel confident we will not only maintain the degree of success we have enjoyed over the last 25 years, but we will also build on it, creating a greater legacy of innovation that will continue to shape the gas sensing industry."

For more information about City Technology, please visit: [www.citytech.com](http://www.citytech.com)






Read, Print, Share or Comment on this Article at: [Envirotech-Online.com/Articles](http://Envirotech-Online.com/Articles)



[www.euro-gasman.com](http://www.euro-gasman.com)

Your fast track to quality  
gas sensor solutions



-  Wide range of advanced quality gas sensors
-  Current, voltage & digital circuitry options
-  Installation, test kits & housing accessories

Unique sensor solutions to help your business  
build first-class and cost-effective products



**We put the sense into gas sensors!**

email: [4792ad@reply-direct.com](mailto:4792ad@reply-direct.com)

### Residential • Car Park Monitoring • Fire Detection Indoor Air Quality • Breath Monitoring • And More!

The **Euro-Gas** gas sensor and circuitry range offers unique features and potential advances for end product performance, ensuring cost effective, high quality solutions for detection equipment manufacturers and system installers.

Carbon Monoxide monitoring in car parks, residential and fire detection systems can specifically benefit from the low cost **ECO-Sure**® CO sensor. Guaranteed to operate continuously for over five years, ECO-Sure is a revolutionary design of high performance electrochemical sensor available as a single sensor and with circuitry to provide 4-20mA or digital output. For example, Euro-Gas offers a TÜV approved package for Carbon Monoxide detection, with conformity to VDI 2053 Standard, developed specifically for underground car park gas detection. Where long-term Carbon Monoxide monitoring is critical, the new **ECO-Sure X**® version provides 10 year warranted lifetime.

For medical applications, the **LXH** CO sensor is designed for the detection of Carbon Monoxide in air, where Hydrogen is a cross-interferer. The primary application of the LXH sensor is for breath measurement. This sensor is at the heart of monitoring instruments in 'stop smoking' programmes worldwide.

Utilising solid state technology, our Hydrogen sensor presents lifetime of five years and choice of digital and voltage circuitry. Solutions are also available for Oxygen, Hydrogen Sulphide, Nitrogen Dioxide, flammable and more exotic gas monitoring.

The latest Carbon Dioxide infrared sensors deliver speed and low power consumption at 3.5mW; ideal for portable and battery powered instruments. Dual beam infrared is at the core of our housed CO<sub>2</sub> industrial and air quality monitors, including our newest traffic light indoor environmental system.

Euro-Gas sensors and accessories suit a wide range of applications, including air quality, HVAC, automotive, process control and more. Euro-Gas is also a worldwide specialist in personal gas detection equipment and launched a new website at [www.euro-gasman.com](http://www.euro-gasman.com) to coincide with the Company's 25th year anniversary.

For More Info, email: [28852pr@reply-direct.com](mailto:28852pr@reply-direct.com)

Euro-Gas Management Services Ltd.  
Churston House, Bascombe Road, Churston Ferrers, Devon, TQ5 0JJ, UK.  
Tel: +44 (0)1803 844414 Fax: +44 (0)1803 844224  
Email: [sales@euro-gasman.com](mailto:sales@euro-gasman.com)



Visit our new website  
[www.euro-gasman.com](http://www.euro-gasman.com)