The ATi UK gas detector range with its unique AutoTest feature has transformed the gas monitoring industry. The AutoTest feature was developed with specific goals in mind, to make our range of gas detectors the safest in the world, provide peace of mind and complete protection for staff and stakeholders and to revolutionise the way gas detectors of the future work.

The pioneering AutoTest feature is the only gold standard in gas detection available that checks itself daily with self-generated gas, allowing for safer and more confident monitoring.

This unique feature is designed to detect and monitor potentially hazardous toxic and flammable gas leaks, to ensure the safest possible working environment. It provides an early warning alarm if a sensor fails to respond, allowing for timely remedial or protective actions to be undertaken.

The F12 range 'holds' all alarms and outputs when the AutoTest is being performed, meaning that there are no triggered high gas alarms to worry about. The system automatically turns the hold 'off' once completed. If there is a gas leak whilst the AutoTest is being performed, the level of gas will override the hold function on the unit and therefore alarm out as normal.

**Third Party Testing**

Conventional gas detection systems require costly manual 'bump tests' and annual service contracts, to ensure health and safety compliance. According to research carried out on behalf of ATi, these manual bump tests are only carried out on average 1.5 times a year. In contrast, ATi's AutoTest checks itself daily.

The new generation F12/D & F12iS gas detector systems are available from ATi with the AutoTest feature that automatically checks if it is functioning correctly, by exposing the sensor to a small amount of gas at specific intervals. ATi's innovative safety system is the only detector on the market that provides daily automatic self-tests, far exceeding any current and potential health and safety regulations.

It is widely accepted that gas monitors need to be tested regularly to ensure staff safety and to prove efficacy. In addition, the F12 also employs smart sensor technology, meaning customers can take advantage of ATi's 'Service Reminder System'. Through this programme, customers can arrange for sensors to be returned to ATi for re-calibration and certification, removing the need for expensive service engineer call-outs and costly down time whilst waiting for replacement sensors.

**Gas Detection Research**

Research findings have revealed a number of gas safety concerns, a lack of consistency regarding what constitutes a reliable gas detection set-up and a lack of confidence in current gas detection systems. Installing an F12 detector with AutoTest would eliminate all of these concerns.

The research reveals a crisis of worker confidence in monitoring systems across multiple industries, with managerial staff and their workforce expressing different opinions across a number of important issues:

- **32%** of managers were very confident that the gas detectors in their workplace actually worked
- **40%** of managers indicated concern that gas detection equipment is tested too infrequently
- **62%** of managers believed that their gas detectors were not tested regularly enough
- **90%** of managers said the frequency of gas detector testing is important for safety
80% of factory/plant workers were concerned about the risks that gas poses in their workplace, and in many cases are unaware if there were any gas detectors in place to ensure their safety.

92% of workers said they would feel reassured if their organisation installed detectors with AutoTest.

The results make it clear that there is an urgent need to review and implement upgraded procedures, enabling improved workforce safety and compliance with industry regulations. Devices that can measure and monitor harmful levels of gas, providing early warning of leaks are essential for allowing timely remedial or protective actions to be undertaken.

The study, carried out by third party researchers, was commissioned by specialist electrochemical-sensor manufacturer ATi in response to expressed concerns in the water/utility industry about methods of safe gas detection. The research focused on three main areas of interest – current awareness and concerns around gas detection, the purchasing of gas detectors and factors influencing it, and the testing of gas detectors.

A total of 100 people were interviewed working in six different industries, namely food and beverage manufacturing, pharmaceutical manufacturing, petrochemical, water/utility, metal plating/printed circuit board manufacturing and healthcare. Within these industries, the employees interviewed were from a range of job titles at managerial level and at workforce level.

**Free, Daily AutoTest Solution**

ATi’s AutoTest function, which automatically checks that a gas detector is working correctly, was identified as a necessary characteristic of a reliable gas detection set-up, with 89% of those currently working with AutoTest detectors in place claiming that they would never use a system without it. Gas detector testing differs dramatically from company to company due to the lack of explicit regulation in this area. Although frequent gas monitoring is proven to increase confidence in gas detection set-ups, research found that around one in eight managers manually test their detectors less frequently than annually.

**F12 Features and Benefits**

- The unique daily AutoTest system provides reliable response checks to insure system integrity. The sensor response is verified with an actual gas sample*, generated on demand.
- The AutoTest function can be programmed to be triggered at a time before production/site starts work. Employees can therefore enter work knowing that their gas sensors are working.
- The AutoTest function can be started by simply pressing ‘start’ in the unit. This is good to prove that the sensor responds correctly if an audit was being carried out.
- Heated sensor holder can be configured to reduce risk of moisture on the sensor.
- Digital coms are available with the F12 range. Also added relays and outputs if required.
- Sends a ‘trouble alarm’ if an AutoTest fails 3 times in a row.
- AutoTest life is around 3 years and requires no re-calibration.
- The F12 monitor uses a ‘dummy’ transmitter and can be used on over 70 different gases.
- The F12iS (Intrinsically Safe) unit has full ATEX approval for all areas.
- The transmitter can be panel mount, wall mounted or stand alone on Unistrut if required.
- Comes with a simple modular format, complete with configuration for any application.
- For customers looking to improve their gas monitoring system or plant-wide protection, the fixed gas detectors seamlessly and safely integrate with other sensors and control systems.
- The ‘Smart’ sensors used in the F12 range are identical to that of the portable unit (D16) which is often used in conjunction with the fixed unit. This allows for simplicity over replacement sensors and calibration.

*either actual gas or surrogate

ATi UK is a leading provider of engineered, analytical sensor monitoring solutions to the water and gas industry. Our pioneering and industry leading range of Network Monitors, Water Quality Monitors and Gas Detectors provide innovative solutions for the most demanding of applications.

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