

2FO and 2FO-N Oxygen CiTiceLs

Already a well-established CiTiceL for the measurement of oxygen in flue gas, the 2FO now has a "sister" sensor - the 2FO-N - which features a "nose" ensuring backward compatibility with original full-size metal can sensors with plastic noses.

The performance of the 2FO and 2FO-N is within the performance envelope of the recently withdrawn C2N and dimensionally they have been designed to fit as replacements.

Connection is simplified by flying lead connection, and the tough, corrosion resistant ABS housing makes them particularly suitable for measuring in harsh environments such as stack gas. The aqua green



	2FO / 2FO-N	C2N
Nominal Range	0-25% O ₂	0-25% O ₂
Output in Air	34 to 48nA	46 to 54nA
Housing Material	ABS	steel
Electrical Connection	flying leads	solder tags
Physical Connection	bayonet type	none
Life in Air	2 years	2 years
Weight	50g	70g
Colour	aqua	silver grey

colour makes them easily recognisable and distinguishable from other oxygen sensors.

A gas tight interface in an instrument is easily achievable via the unique bayonet mounting system. A bayonet-mounting accessory is available which is compatible with the City Technology aspiration fixing and mounting nose accessories.

product news

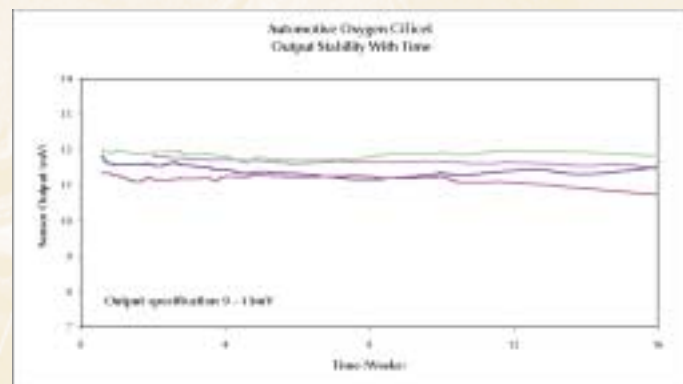
■ Improved Oxygen Sensor performance

Based on the KAIZEN principle the performance of City Technology automotive oxygen sensors have been evaluated and further enhanced.

Long term drift is a feature of all oxygen sensors and reducing this effect will lead to extended life, and increased stability.

Improved manufacturing techniques mean better contact between the current collector and anode. With this larger contact area the sensor becomes more efficient with less current loss due to internal resistance.

Already, long term testing shows significant improvement in performance (see graph).



City Technology automotive oxygen sensors can be expected to last longer than two years in service, and have BAR 97 and PTB approvals.

■ **First Technology Update**

The process of acquisition of CTL by First Technology (FT) is progressing as expected with over 90% of CTL shareholders having accepted the recommended offer. To all intents and purposes, CTL is now a subsidiary of the FT Group, and was 'de-listed' from the Stock Exchange on 4th May after being first listed in 1996.

Kevin Breen (Chief Executive) is now a member of the First Technology Board and the other directors of CTL will continue with the same responsibilities and authority as before, reporting to Kevin as usual.

We would like to take this opportunity to thank all our customers for their continuing support and would like to confirm our commitment, now with the backing of First Technology, to continue providing new and innovative gas detection solutions, as well as improvements to service and existing products.



Next issue:
Accessories, Partial Pressure vs.
Volume concentration

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David Inward - Business Development Executive ▼



David Inward joined the emissions team at City Technology on 5th April. David is a fluent German speaker with a degree in Chemistry with German. He has worked for Hartmann & Braun, both in Germany and UK since 1992 in a series of technical and sales roles. From 1995 as External Sales Engineer David was responsible for sales in the North of England for gas analysis applications in power, cement, steel, chemical and pharmaceutical industries.

Peter Wright - Business Development Executive ▼



Peter Wright has been appointed Business Development Executive for the Safety West team and joined City Technology on 2nd May. Peter has gained considerable experience of the gas detection industry having spent the past six years working in a series of senior sales positions with Servomex plc. Prior to this Peter worked extensively in Europe for major companies including ICI Fibres, Pye Unicam and JCB and is also fluent in German and French.

■ **Electrodes - Part Three**

The structure of City Technology electrodes results in CiTiceLs with a high electrochemical activity and therefore the sensors produced are robust and reliable. The basic design was discussed in the last issue of the Technical Bulletin, however constructing the electrodes is a complex process, which draws on the knowledge and experience available in both the manufacturing and development departments of City Technology.

The catalyst mixture, containing hydrophobic PTFE particles, is formed onto the PTFE backing disk using a complex process of heating and pressing. City Technology are refining this process to provide more consistent electrodes, and a number of investments are being made to move away from traditional batch

production methods to a new, innovative continuous production process. This will ensure that every electrode is exposed to identical conditions, thus resulting in even more repeatable electrodes and producing superior sensors.

The electrodes are fundamental to all CiTiceLs, and new developments in both the design and manufacture of electrodes have a major influence on the quality of the finished sensor. City Technology are operating a company wide continuous quality improvement program, but the initiatives being made in this area mean that improvements are being made right at the heart of the sensor. The result of this for our customers is more consistent sensors with a long, stable lifetime and limited cross sensitivity.

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