

Technical Note

13/01/2009

Calibration of ETO and VO sensors

Document Reference: GEN016

Product: Calibration of ETO and VO sensors

Subject: Calibration advice

Solution proved by City Technology.

Calibration of ETO and VO sensors.

Ideally, calibration of electrochemical sensors should take place with the primary gas that the sensor has been designed to detect (ethylene oxide for the 7ETO sensor). However, sometimes this is not possible, in this case refer to the specific sensor datasheet for a full list of cross response factors.

Sensors which generate an output by oxidising the target gas need a supply of oxygen to the counter electrode to support the balancing oxygen reduction reaction which takes place there. Generally, a minimum of a few thousand ppm oxygen is required to support this and this may be provided by the level of oxygen in the sample gas. For this reason, Crowcon recommend that the calibration of ETO and VO sensors is carried out with a calibration gas in a balance of air.

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