Use of Tunable Diode Laser Spectroscopy on Safety Applications

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Tunable laser Diode Spectroscopy (TLDS) has been a growing analytical technique for a number of years. The specificity of the measurement low LDL and speed of response have lead to it becoming a useful technique in process control measaurements.

Reference Cuvette Technology

One of the weaknesses of the earlier technologies was the fact that when the las er was measuring zero (ie there was no measure gas present) the laser had a tendency to “lose lock” and start measuring adjacent peaks (not of the measure gas) and, hence, give false positive readings.

Servomex have developed a Line Lock Reference Cuvette that fits within their TLDS Analyser. This ensures that the analyser always makes its measurement at the correct frequency, hence, ensuring a correct gas measurement.

We will describe the technology and how it works and demonstrate its use in the measurement of Oxygen and Carbon Monoxide in safety applications.