SGX SENSORTECH

- SENSOR CALIBRATION
- FLEXIBILITY & AUTOMATION
- COST & SPACE SAVING

A SOLID BUSINESS CASE IN COLLABORATION WITH
SGX SENSORTECH

GENERAL INFORMATION ABOUT THE PROJECT

TARGET OF THE PROJECT:
Measurements of cross sensitivity of gas sensors to non-standard gases

DEPARTMENT:
Research and Development

HEAD OF PROJECT MANAGEMENT:
Grzegorz Konieczny

ROLE OF MCQ INSTRUMENTS:
To easily conduct repeatability tests that can be used to verify components quality.

MORE INFORMATION ABOUT THE COMPANY

For more than 50 years, SGX Sensortech, has remained at the forefront of air quality sensors and modules.

The innovative products have helped protected the occupants of cars from deteriorating air quality whilst driving through polluted cities, reduced the cost of air conditioning in buildings and made the work environment a safer place from flammable and toxic gas hazards.

DESCRIPTION OF THE APPLICATION AND THE TARGET

SGX Sensortech Limited is a manufacturer and research company of sensors and detectors for Industrial Safety, Environmental Monitoring.
In modern times far more attention is being paid to monitoring of environment.
New markets emerge which are both related to growing demand for sensing solutions for residential market as well as specialized industrial solutions, where requirements on performance and cross sensitivity are very high.
To be able to provide best solutions our sensors/detectors have to be characterized with a much wider spectrum of gases and potential contaminants.

In our applications GB100 series gas blender is used for measurements of cross sensitivity of gas sensors to gases which might potentially occur in field application. Software provided with the gas blender allows for accurate mixing of gases allowing for analysis of sensor response over a wide range of concentrations.
Flexibility of gas mixing along with the included gas library makes it possible to verify response to single gas mixtures with balance gas (air, nitrogen), as well as multiple gas mixtures, which is especially important during characterization of variations of filters used in infrared sensors.

BENEFITS AND SAVINGS

With GB100 gas blender, we can easily conduct repeatability tests that can be used to verify components quality.
Last use of the blender is mid-term gas response testing. Software allows for managing gas application sequence, which is crucial during tests related to performance standards.

COST & SPACE SAVINGS:

Significant reduction of number of gas mixtures required for initial sensor characterization. Usually one mixture and balance gas is enough. Buying cylinders is expensive and limits the availability of mixtures that may be required. Gas cylinders are also large and often require special storage arrangements, as well as taking up valuable space.

GAS BLENDER VS CYLINDER:

The ability to blend different gases on-demand is an incredibly powerful tool in the development of innovative gas detection equipment. And provides a level of flexibility that gas cylinders cannot provide. Mixing of gases allowing for analysis of sensor response over a wide range of concentrations.

SUCCESSFUL ACHIEVEMENT:

The MCQ gas blender is used for measurements of cross sensitivity of gas sensors to gases which might potentially occur in field application. Allowing on-demand, real time characterisation of sensors.

FLEXIBILITY & COMPACTNESS:

By using the MCQ gas blender it is possible to dial up a simulation of a mixture at any time, and to a certain degree, different concentrations of the blended gas mixture. Compact gas blending solution that can be used in many applications, easy to transfer and operate.

SOFTWARE AUTOMATION:

Thanks to our Software PRO Version and its option "Automatic Program", now the SGX can bring forward experiments in automation. Moreover Software is easy to operate (no need for long training of personel).

STABLE FLOW & REPEATABILITY:

Thanks to our revolutionary method every gas flow has a great stability as SGX can easily conduct repeatability tests that can be used to verify components quality.

READY TO TALK ABOUT YOUR SOLUTION?

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