

# CMV-2

## On-line gas analyser for quality assurance of Modified Atmosphere Packages (MAP)



### Benefits

- Stops packaging machine if preset limits are exceeded
- Measures every packaging cycle
- Continuous process monitoring of gas content
- Lower labour costs compared to manual testing
- Less packaging waste than with manual testing

### Features

- Oxygen or combined oxygen and carbon dioxide measurement
- Alarms for low or high gas concentrations
- Data logging of measurement data
- Automatic switch between different gas mixes if used with MAP Mix 8000 EL
- Optional measurement of buffer tank gas composition

## A win-win for thermoforming and tray sealing lines

Customers want higher quality assurance levels... Management wants higher production rates... Here's pleasing news for both.

The CMV-2 gas analyser lets you step up — from random quality control checks to on-line quality assurance — and speed up production as well. By measuring gas composition on a continuous basis, it ensures that each and every package is flushed to spec — a big win for your customers. And because testing is carried out automatically, process lines can be run at high speeds without compromising quality — management will thank you too.

Automatic testing with the CMV-2 isn't just faster and more reliable than manual testing — it's also more efficient. If there's a problem with gas content, the system notifies the operator immediately — there's no waste of time. And if preset limits are exceeded, the CMV-2 simply stops the process — so there's no waste of products or packaging either.

# HOW DOES IT WORK?

- 1:** An individual program can be created on the CMV-2 for each product to be packaged. The first step is thus to select the correct program to ensure that the correct alarm levels are set. If the CMV-2 is connected to the electronic gas mixer then the correct gas mix will also be set.
- 2:** When the packaging machine is running the residual oxygen level (and optionally the carbon dioxide level) is measured for every cycle. The CMV-2 takes the gas sample directly from the sealing die in the machine and gives an average measurement of the gas content in the die.
- 3:** If the oxygen or carbon dioxide level is close to the limits the operator will be notified, and if the limits are exceeded the packaging machine will be stopped.
- 4:** With optional buffer tank measurement, gas composition in the buffer tank can be checked before packages are flushed, providing even greater control.

CMV-2 is an analyser designed for use with thermoforming (TFFS) and tray sealing machines equipped for Modified Atmosphere Packaging. The analyser works by measuring the gas content non-destructively before sealing the packages.



PBI/DS-Dash-gastec-CMV-2-EN-5

## Technical Specifications

Available configurations	CMV-2
Oxygen measurement (zirconia sensor)	Standard
Carbon dioxide measurement (dual wave infrared)	Optional
Control of MAP Mix 8000	Yes
Number of test programs	32
Measuring range	0-100%
Resolution	O <sub>2</sub> : 0.001% / CO <sub>2</sub> : 0.1%
Sensor accuracy at 1% O <sub>2</sub> and 20% CO <sub>2</sub>	± 0.01% oxygen and ± 0.8% carbon dioxide
Heating time	10 min
Dimensions & weight	Sensor module: 160 x 260 x 340 mm (HxWxD), 10.4 kg External display: 150 x 200 x 100 mm (HxWxD), 5.5 kg Display for built-in: 129 x 213 x 76 mm (HxWxD), 4.4 kg
Power supply	100-240 VAC, 50-60 Hz
Buffer tank measurement	Optional
Display available	Black box (no display - OEM integration only) Stand alone (IP 65) Built-in (IP 52)
Connections	2 x RS232C for external printer, PC connection, gas mixer and 4 relays (Ready + 3 alarms)
Compliances	CE 

Specifications subject to change without notice - further specifications are available in the User Guide.