



BEVERAGE SOLUTIONS

HAFFMANS' QUALITY CONTROL SOLUTIONS FOR BEVERAGE PROCESSING EXCELLENCE

CHECKING BEVERAGE QUALITY SINCE 1947



Pentair Haffmans develops, supplies and supports quality control equipment that is backed by professionals with extensive process knowledge. Whether you are upgrading to more advanced technology or planning a major expansion, we have the quality products to serve you today and in the future. Pentair Haffmans' laboratory, at-line and in-line quality control equipment covers all the important aspects within the quality control chain for soft drink and other beverage production. Our product portfolio includes instruments for measuring carbon dioxide (CO₂), oxygen (O₂), air, alcohol/extract, and turbidity as well as for monitoring processes such as pasteurization and bottle washing. As a multinational company with a strong focus on innovation and customer satisfaction, Pentair Haffmans has a presence in more than 150 countries.

BEVERAGE TRENDS

Carbon dioxide as an ingredient and preservative has been a part of carbonated beverage production since its inception. Consumer trends toward natural, vitamin enriched, preservative-free beverages are driving changes in beverage processing. As a result, O₂ measurement is needed for juices, functional beverages, bottled water, cold press beverages, isotonic, and dairy blends for color degradation, content, taste, shelf life, and spoilage concerns.

Pentair Haffmans' proven technology delivers superior solutions for O₂ and CO₂ management to the beverage sector. Our O₂ measurement technology provides accurate and precise O₂ measurements down to 0-2000 parts per billion. We have packaged this technology for use throughout a beverage plant for quality inspection, validation, process monitoring, and control for HACCP and food safety.



NON-INVASIVE CO₂ MEASUREMENT



CO₂-Selector

The CO₂-selector offers non-invasive, selective CO₂ package measurement. Using laser-based technology means no contact with measured medium and no wasted product. Results are temperature compensated and delivered in 5-10 seconds. No moving parts results in minimal maintenance. The system can be used with both glass and PET bottles. The results are not impacted by other gases in the headspace such as O₂, nitrogen and hydrogen.

Key Features

- Non-invasive measurement
- No product loss
- Fast repeatable measurement

IN-LINE CO₂ & O₂ MEASUREMENT

A quality beverage can be defined as one that consistently meets specifications. To ensure this in each step of the production process, starting with the raw materials, through production to the analysis of beverage samples, control is crucial. With Pentair Haffmans' quality control solutions you will raise your plant's overall performance.

In-line O₂ Gehaltemeter, type OGM

Install the OGM in the production process where the determination of the dissolved oxygen (DO) content is critical to the product's quality. The in-line O₂ Gehaltemeter combines high accuracy with excellent measurement stability.

In-line CO₂ Meter, type AuCoMet-i

The In-line CO₂ Meter, type AuCoMet-i, sets standards in terms of quality, handling and ease of maintenance. It enables a fast and accurate determination of the CO₂ content based on the internationally standardized method of Henry's Law. In addition, the AuCoMet-i can easily be extended with an O₂ sensor. Pentair Haffmans' optical O₂ measurement technology provides better response times than traditional O₂ measurement instruments, and does not require frequent calibration. With the AuCoMet-i both, CO₂ and O₂ measurements, can be done independently.

ANALOG CO₂ MEASUREMENT

Analog CO₂ Gehaltemeter, type GMT

Our first generation analog gehaltemeter provides quick accurate and affordable CO₂ measurement without having to shake the sample repeatedly prior to obtaining a measurement. The operator simply draws a sample and pulls a lever to activate the measurement cycle.



GMT

AT-LINE/LAB CO₂ & O₂ MEASUREMENT

CO₂/O₂ Gehaltemeter, type c-DGM

Get flexibility and value from the c-DGM with one device for CO₂ and O₂ measurement - up to 10 product types. In addition, you'll benefit from lower maintenance and cleaning costs, because service is needed for just one device. Assure that your beverage tastes as great right after packaging as well as in a couple of months.

O₂ Gehaltemeter, type o-DGM

The o-DGM is the ideal solution to audit DO levels and troubleshoot where the O₂ pick-up is occurring in the process. The portable O₂ Gehaltemeter uses advanced optical technology, which results in reproducible reduction of product losses.

Intelligent CO₂ Gehaltemeter, type i-DGM

The Intelligent CO₂ Gehaltemeter provides fast, accurate and reproducible CO₂ measurement. It enables a fast and accurate determination of the CO₂ content based on the internationally standardized method of Henry's Law. Get across the board savings with a lower investment cost - one instrument for different product types, reduced beverage loss, less labor, and low maintenance.

Inpack TPO/CO₂ Meter, type c-TPO

The innovative Inpack TPO/CO₂ Meter offers a novel method for measuring Total Package Oxygen (TPO) based on a differentiated measurement of Head Space Oxygen (HSO) and DO from a single package. This enables pin-pointing the source of the O₂ in the package so that proper actions can be taken to optimize the filling process.

The multiple routine determinations of TPO and CO₂ are fully automated. Up to 100 different product types/packages can be programmed and easily selected. The instrument is suited for the most common sizes of bottles and cans.

SAMPLING

ISD

The user-friendly Inpack 2000 Sampling Device, type ISD, is a robust instrument for sampling beverages from bottles and cans without air intake. It can be used for the determination of DO content when used in combination with a DO meter such as the c-DGM.



OGM



o-DGM



c-TPO



c-DGM and ISD



FOOD & BEVERAGE

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