HERACLES NEO E-Nose
New possibilities

The new generation of HERACLES Neo electronic nose from Alpha MOS features **unsurpassed performance in smell and flavor analysis**.

Combining **dual fast gas chromatography** detection with **powerful data processing based on multivariate statistics** and an **optional module for sensory and chemical characterization** (AroChemBase), the instrument is the perfect tool for industrials involved in **quality assurance** and **product development**.

AlphaSoft   MMI **Pro**   AroChem**Base**

BETTER STABILITY & QUALITY

- An **improved fixation of the columns** within the oven ensures a **better retention times stability over time and thus a more robust quality assurance model**.
- Thanks to **optimized thermal management** of the instrument, a **better thermal stability is achieved**, leading to **improved performance and longer lifespan** of the instrument.
- The AlphaSoft includes a **new method for system cleaning and preparation** before any first analysis of a sequence. This will remove the impurities collected during the standby time by conditioning the trap and flushing the column if the duration of validity period of cleaning is surpassed. This method directly **enhances chromatograms quality and instrument stability over time**.

HIGHER SENSITIVITY & ACCURACY

- The **dynamic range of the detector electronics has been increased by 35 times, without compromise on detection limits**. Since major components of the sample are detected without any risk of signal saturation, the sensitivity of the method can be increased for minor compounds. This allows to detect more molecules that can be computed by statistics.
- The **improved temperature regulation** inside the system allows to obtain better chromatographic stability and lower chromatographic noise and artifacts leading to **better signal/noise ratio.** Therefore, we **achieve double in sensitivity.**

POWERFUL TOOLS

- Sensory ID: AlphaSoft v15 is equipped with an optional new patented method for data processing. It makes **chromatograms processing easier** by removing the need for an integration step and for external standard injection (chromatograms alignment is automated). Thus, the electronic nose achieves a **better tracking of chemical and sensory defects that can occur during production**. Sensory ID is our model designed for industry users who need to make fast and good decisions with a PASS/FAIL display.
- MMI Pro v1.0: an **intuitive interface** specifically designed for Production operators. **Find all your tools in one window view** create and launch easier and faster analysis. It is specifically designed to production environment by reducing the number of steps for routine operators and avoid potential errors.
- AroChemBase v7: this new version of our unique molecules database have been enriched with more than 15,000 compounds, allowing **a larger range of identification**.

H E R A C L E S N E O Portfolio

Configuration		HERACLES NEO 100	HERACLES NEO 200	HERACLES NEO 300
Hardware		Dual fast GC electronic nose		
Equipment	Computer	●	●	●
	Leak detector	●	●	●
	Start-up kit mode	Manual	Headspace	Headspace/liquid
	Injection mode	Manual	Headspace autosampler	Headspace/liquid autosampler
	FID station (H$_2$/Air/Compressor)		●	●
Equipment options	Tedlar sampling bags	Option	Option	Option
AlphaSoft software	Chromatographic Data System	●	●	●
	AroChemBase	●	Option	●
	Sensory ID		●	●
	Statistical data processing		◖ *	● **
	MMI Pro		Option	Option

 * Level A: sample mapping (PCA)
** Level B: sample mapping (PCA) & further investigations (SIMCA, SQC, DFA & PLS)

CHECK HERACLES NEO **100:** more than a gas chromatograph, use HERACLES NEO 100 to check rapidly your compounds of interest, and identify them easily due to AroChemBase linked to dual GC technology.

QUALIFY HERACLES NEO **200:** first step to ensure the production quality (batch-to-batch consistency) and prevent any outlier by confirming the presence or absence of your sample markers. AroChemBase can even help you identifying them!
Sensory ID is a specific algorithm developed for an easy to read quality information with a PASS/FAIL display. The first level of statistical data processing provides an easy comparison of your sample. MMI Pro is an intuitive interface that displays only the information you need for your daily use.
Heracles NEO 200 allows to reach a high throughput thanks to a gas autosampler.

EXPERTISE HERACLES NEO **300:** a powerful system offering in-depth investigation on chemical composition: origin of off-odors and sensory defects, competition benchmarking etc. The full data exploration package allows creating odor maps, predictive, quantitative and qualificative models to easily compare your products and identify the molecules with AroChemBase.
HERACLES NEO 300 is also equipped with a liquid/gas autosampler, which makes it the perfect solution for all your applications from R&D to QC!