Leak detection technology for flexible packaging



GAMMATOWER

Stand alone bench-top O₂ analyser with a perforating tower.



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The **GammaTower** is a stand-alone bench-top O_2 analyser with a perforating tower. The **GammaTower** response time is much faster than traditional gas analysers, as there is a much shorter tubing between the sample and the gas sensor as compared with other traditional gas analysers. It also has been designed to avoid the usage of expensive septum & needles.

Consumables: costs & challenges:

The costs: Currently, all methods to analyse O_2 or CO_2 or to leak test flexible packaging require that you use a septum, which you have to manually adhere to the packaging, and then manually perforate the septum with a hollow needle to perform the leak test.



Septum perforated by a hollow needle.

A septum takes the form of a sticker that is adhered to the flexible packaging to be tested. The septum's main function is to provide a leak-free seal to maintain the gas pressure inside the system. In other words, it helps to avoid creating an additional leak when the packaging is perforated with a needle.

One test = one septum. A septum cannot be reused.

Some users are spending 25,000 to 35,000 USD per year on septum's alone.

The challenges:

When there is little space between the product and the packing (headspace), the hollow needle could pierce the food and partially block the needle. As a





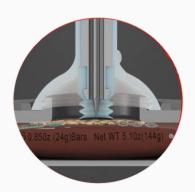


consequence, the flow would become restricted, or even cease, which results in the gas test or leak test becoming compromised.

This is entirely avoided with the **GammaTower**, due to the use of a thin conical stainless-steel pointer, therefore avoiding any partial or total blockages.

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GammaTower thin conical stainless-steel pointer.

GammaTower main advantages:

- Accurate testing.
- Cost savings.
- Faster response time.

Operating instructions:

Place the sample under the tower, adjust manually downwards, perforation starts automatically, perform the test and read the results on the OLED Display (1.5") on the front of the GammaTower.

It is only possible to connect a single instrument at a time.

Technical specification:

Stand:

Large table stand with focusing arm holder.

Cantilever holder for free movement of the tower.

Tower:

O₂ analyser & patented perforating device.

OLED display 1,5 ".

Servo driven internal perforating thin conical stainless steel pointer.

Silicon bellows diameter: 15mm* (* other sizes / shapes: consult us).

Cantilever holder for free movement of tower.

O₂ sensor: FIGARO KE 25 from Japan.

Temp: min/max 5 - 60°C.

When calibrated at both 0% and 100% of O_2 , accuracy in the range from 0-100% O_2 shall be within $\pm 5\%$

of full scale).

Life expectancy at 20°C in normal air (1013hPa /

20.7% O₂): 3 years.

Foot print: 260 x 250 mm Weight: 6 Kg.

The **GammaTower** is guaranteed 3 years.

WARRANTY TERMS AND CONDITIONS, other ASTAARA products, videos, dimensions, weights, drawings and further information @

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