



Multiple Atmospheres, One Device.
Whitley AtmoGen

About Us

Don Whitley Scientific Limited (DWS) has been developing, manufacturing, and selling equipment and associated products for microbiology and cell culture applications worldwide for 50 years.

All products designed and developed by DWS are manufactured in our own premises in England.

In the UK and Germany, products are sold directly. In other parts of the world, we supply and support our products via a carefully chosen distributor network.

Accreditation:

DWS is certified to ISO 9001 for Quality Management and ISO 14001 for Environmental Management.



About Whitley Atmogen

Multiple atmospheres, one device.

With fresh, modern graphics, bespoke software, and optional dual gas input, the AtmoGen can generate multiple atmospheres: anaerobic, microaerobic and capnophilic – and still in the most convenient, rapid and cost-effective way.

It is easy to use, with no complicated operator training required, and can be used with your existing anaerobic jars*.

Unit can also operate on 240 V $\pm$ 6%, 13 A, 50 Hz AC single-phase power supply.

The facts and figures:

A single microaerobic cycle is completed in just 19 seconds (compared with a competitor's at 2 minutes 35 seconds).

A single anaerobic cycle - without catalyst check - with the AtmoGen takes 1 minute 55 seconds (compared to 6 minutes 50 seconds from the same competitor).

A capnophilic cycle takes an astounding 3 seconds.

We have calculated** that if you are processing 30 samples per day, the running cost of AtmoGen is less than £720 per year, whilst using gas packs costs £3,580 per year. Based on this the cost of the AtmoGen could be recouped in less than two and a half years.

**Figures calculated using 2023 prices from BOC, DWS, and Thermo Fisher

Product features:

- Comes complete with an optional catalyst check to ensure an effective catalyst is in place.
- Generate multiple atmospheres: anaerobic, microaerobic (5%-10%), and capnophilic
- Comes with one Whitley Incubation Box as standard
- This system can gas three jars simultaneously.
- Colour touchscreen interface.
- Can be used with almost any type of anaerobic jar (*using an adaptor kit).
- Operates with re-usable catalyst.
- USB and Ethernet enabled, providing the flexibility to connect to almost any printer.
- Data logging - retains 90 days' worth of data.



Whitley Incubation Box

New from Don Whitley Scientific is the rectangular, transparent and stackable anaerobic 'jar'. It can be used to create the perfect environmental conditions for the isolation and cultivation of anaerobic and microaerobic organisms, and for cell culture applications.

The Whitley Incubation Box is ideal for use with the Whitley AtmoGen (evacuation/replacement method) or as a stand-alone system to use with gas generation sachets.

Because of the shape of the vessel, and as no connectors or valves protrude beyond the outer surface of the lid, Whitley Incubation Boxes can be stacked on top of each other inside an incubator or on the bench, saving valuable space. The main jar (without the lid in place and with no samples inside) can be nested with other empty jars so that work in progress takes up minimal space.

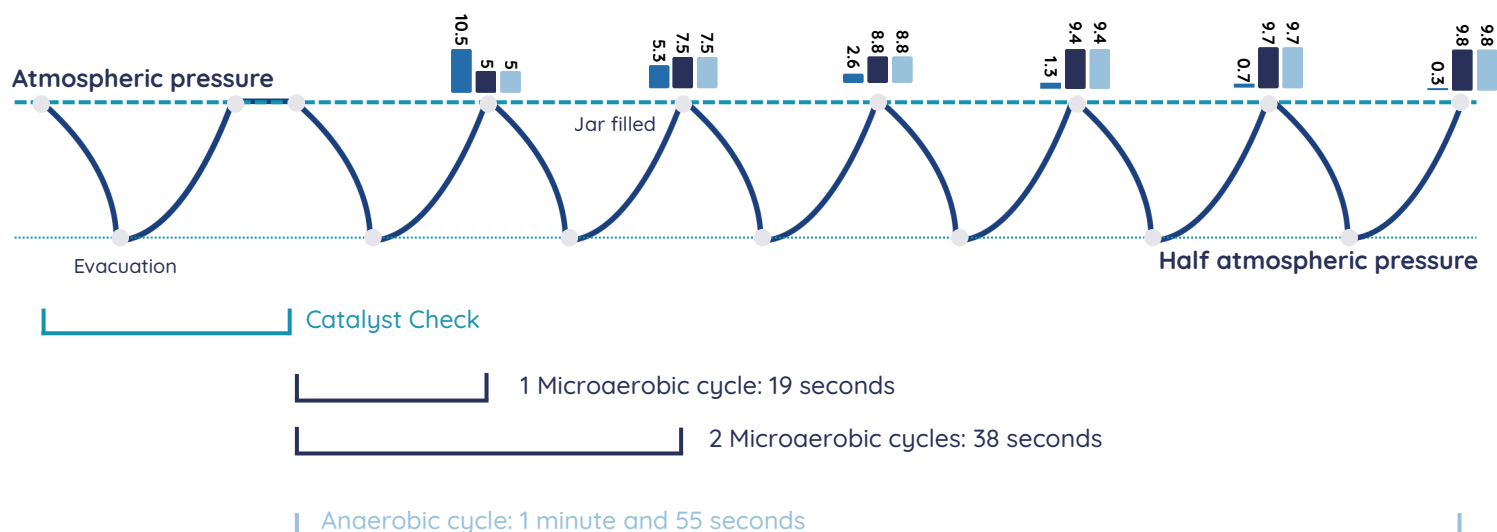
Product features:

- Accommodates both Petri dishes and multi-well plates.
- Both lids and bases can be nested for storage.
- Flexibility to create different atmospheric conditions.
- Latches are permanently attached to the lid so there are no loose parts to misplace.
- Completed boxes can be stacked on top of each other for incubation.
- Rectangular shape saves space in the incubator.
- Includes a safety valve to ensure an appropriate level of vacuum is achieved without damaging the box itself.
- Durable and lightweight.



AtmoGen

Gas Cycles



- **Optional Catalyst Check:** The system pulls a partial vacuum - down to approximately half atmospheric pressure - then refills the jar with ANO₂ gas to equalise pressure. Over a five-minute period, the AtmoGen's pressure sensor monitors for any pressure change caused by oxygen and hydrogen combining, confirming that the catalyst is active.
- **Microaerobic Conditions:** The user can select either one or two vacuum/evacuation cycles, lowering the oxygen level to 10% or 5%, respectively.
- **Anaerobic Conditions:** Six vacuum and evacuation cycles are performed, reducing oxygen to below 0.3%. At this point, the reusable catalyst removes any remaining residual oxygen.

*Timings based on the use of one Incubation Box.