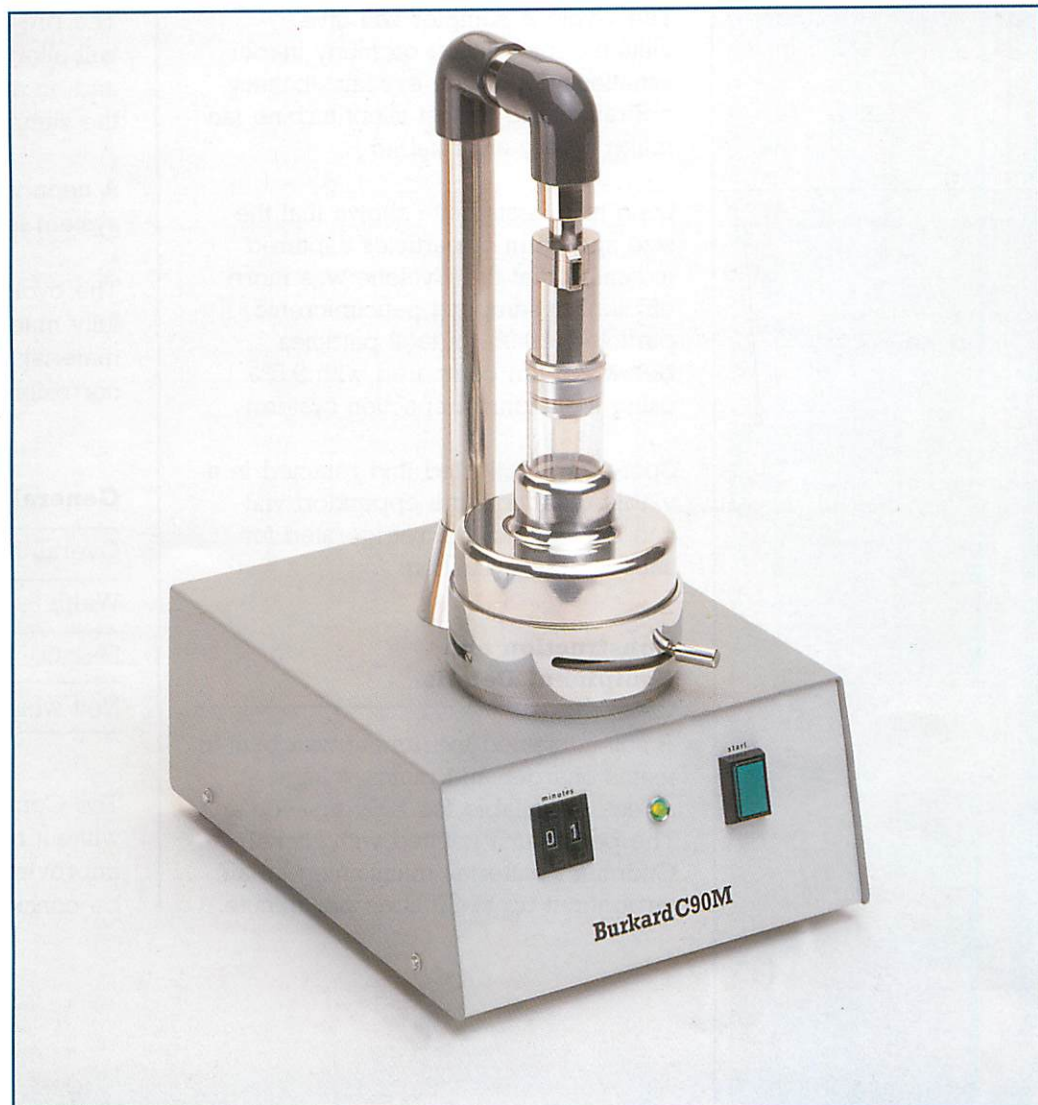


Cyclone Sampler for Airborne Particles

A high capacity Air Sampler
utilising a reverse-flow cyclone

Patent No. 9106335.4



A NEW technique developed for the collection of airborne particles using a small reverse-flow cyclone.

Offering:

High efficiency over a wide range of captured particles. 90% for particles in the 1 micron range.

No danger of overloading with catch. Particles are collected into a 1.5ml. eppendorf vial through a smooth vortex air flow of 16.6 lmin.⁻¹.

Gentle capture of sample and capable of sterile handling.

Small flow resistance within the sampler

so that low power and a very quiet built-in suction pump make it possible for long-term operation.

Further advantages include more flexible and less laborious sampling well suited to new technologies including immunological methods for quantitative assessment and highly specific recognition.

The sampler illustrated utilises a standard 9 x 3mm vertical orifice and is recommended for use in slow moving air or directed into light winds of constant direction.



**Sole Manufacturers
and Exporters**

**Burkard
Manufacturing
Company
Limited**

Woodcock Hill Industrial Estate
Rickmansworth,
Hertfordshire, WD3 1PJ
England

Telephone: 01923 773134
Fax: 01923 774790

The Cyclone sampler will give valuable information on many indoor situations, for which its mains/battery operation and almost silent turbine fan make it very acceptable.

Long-term tests have shown that the size spectrum of particles captured indicated that the Cyclone was more efficient at sampling paucimicronic particles (19.9% of total particles below 2.5 μm compared with 9.5% using a standard impaction system).

Spores are collected and retained in a viable condition, the eppendorf vial can be capped and refrigerated for subsequent evaluation.

Construction and Equipment Details

A self-contained instrument with built-in mains charger and mains voltage selector available for 120v or 240v ac. The power unit is fitted with Nickel Cadmium batteries maintaining an air throughput up to 20 litres per minute.

The pre-set timer on the front panel will allow 99 minutes of running time and an audible alarm will sound when the sampling time is complete.

A neon indicator shows when the system is functioning.

The cyclone unit is a precision item fully machined from hard alloy material, natural anodised to prevent corrosion.

General Specification

Overall height	330mm
Width	170mm
Length	220mm
Nett weight	4.6kgs

The Company reserves the right, without notice, to make such improvements to equipment as may be considered necessary.



**Sole Manufacturers
and Exporters**

**Burkard
Manufacturing
Company
Limited**

Woodcock Hill Industrial Estate
Rickmansworth,
Hertfordshire, WD3 1PJ
England

Telephone: 01923 773134
Fax: 01923 774790