Multi-Stage Liquid Impinger

Precision Metal Type (20 l min-l) K.R. May 1966 Bact. Rev. 30,559





Sole Manufacturers and Exporters

Burkard Manufacturing Company Limited

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Telephone: 0923 773134 Telex: 932620 BURKRD G Fax: 0923 774790 Since 1966 bacteriologists have come to respect the May impingers for the separation of particles according to their deposition sites in the respiratory system. The fractions are collected gently into liquid where clumps separate into viable units. There is little danger of sample overload and sub-samples permit the use of a variety of culture methods.

The original designs involved complex glass blowing, were difficult to clean and to reproduce accurately. The 20 l min $^{-1}$ size is designed to produce particle fractions (> $10 \,\mu$ m, 10- $4 \,\mu$ m, < $4 \,\mu$ m) that are closest to those likely to be agreed as international standards.

The Burkard version closely follows May's intermediate (20 l min⁻¹) size, accurately produced in anodised aluminium alloy (or stainless steel). Airtightness is ensured by vertical compression, releasing this allows the sampler to be dismantled for removal of the catch, and for cleaning. It can then be fitted and re-assembled before heat

sterilization and operation. The flow is controlled by a critical orifice built into the third stage. To ensure this accurate flow the vacuum pump must be capable of maintaining a pressure difference of at least 180mm (7in.) of mercury. A 'stagnation-point shield' is provided to improve aspiration efficiency in moving air. To maintain the designed depth of collection fluid in the machined chambers it is recommended that 6ml. be added to each stage. (Not 4ml. as originally described).

General Specification

Overall height	145mm
Overall length	115mm
Overall width	100mm
Nett weight	670grms
Vacuum hose	6mm bore