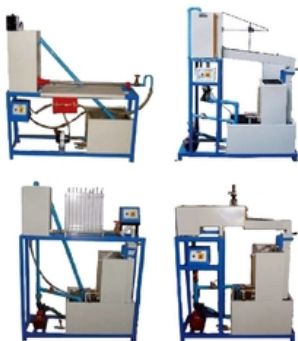


Elutriator



Product Categories: [Engineering Equipment](#), [Mechanical Operation Lab](#)

Product Page: <https://www.labappara.com/product/elutriator/>

Product Description

Elutriator

An Elutriator is vertical tube through which a fluid passes upwardly at a specific velocity while a solid mixture, whose separation is desired, is fed into the top of the column. The large particles, which settle at a velocity higher than that of the rising fluid, are collected at the bottom of the column, and the smaller particles are carried out of the top of the column with the fluid. Several columns of different diameters in series may be used to bring about a further separation

The set up consists of two vertical tubes of different diameter in which water is passed at a controlled velocity. A tank with pump is provided for re-cycled water supply and flow rate is measured by rota meter and controlled with the help of control valve. The tubes are arranged in a fashion of ascending cross-section area. The particles are introduced through a feed hopper provided at first tube, the smaller particles are carried over in the fluid stream, while the large particles settle against the upward stream. The overflow from the first tube introduced at the bottom of second tube is passed vertically upwards and the overflow from the second tube introduced at the, is passed to drain. The weighed sample originally placed in the first tube of smallest diameter is classified into fractions according to

their settling velocities. The fractions are collected in successive tubes by a special arrangement and may be dried and weighed to make analysis.

Technical Details:

Elutriator Tubes

Material Stainless Steel, 2 Nos. of Tubes of Length 500 mm

each with successive Dia. 70mm, 96mm.

Water Feed Tank

Material Stainless Steel, Capacity 60 Ltrs.

Pump

FHP.

Flow Measurement

Rotameter

Solid Collectors (2 Nos.)

Material PVC fixed to individual tube.

Fine Dust Collector

Nylon cloth

Collecting Tray (2 Nos.)

Material Stainless Steel, suitable capacity.

Control panel Comprises of:

Standard make On/Off switch, Mains Indicator etc.

Instruction Manual

An ENGLISH instruction manual will be provided along with the Apparatus

A good quality painted rigid MS Structure is provided to support all the parts.