Physics – Pressure







1. Bourdon Gauge

This product is for both general and laboratory use. The gauge of rugged design is mounted on a heavy metal base giving great stability. The read-out is by a substantial black needle on a 100mm diameter white face. The back of the gauge is enclosed by clear Perspex, allowing the mechanism to be viewed. The input metal tube is rifled and designed to fit rubber tubing of 8mm internal diameter.

Calibration: scales are given on the white face in both kg/cm² (black) and psi (red). Conversion to SI units (pascals) can be obtained with sufficient accuracy by multiplying the kg/cm² readings by 105.

Note: the gauge is for positive pressures only (i.e. those in excess of atmospheric pressure). Connection to a source of negative pressure (e.g. vacuum pump) could result in damage to the apparatus.

Code	Pack	Price
BC-2004	Each	£78.90

2. Charles' Law Apparatus

This Charles' Law apparatus is a simple way of demonstrating that the volume of a fixed mass of gas is proportional to its absolute temperature. Each unit is supplied with an easy to read oil bead and clear measurements ready to use.

- Height 33.5cm x width 40cm x depth 1.5cm
- Capillary tube 0 to 20cm reading
- Thermometer -10 to 100°C

Code	Pack	Price
SE2037	Each	£17.52
PY1377	10	£184.85

3. Hero's Engine

A twist on the classic Hero's engine apparatus that comprises of a conical flask suspended on a revolving bearing. A bung seals the flask. Water is added to the flask and heat applied using a flame. The steam is ejected by two parallel brass exhausts, the steam causes the apparatus to spin on its bearing. This is much more reliable, cost effective and practical than the traditional method.

This is for demonstration purpose only and must be used behind two safety screens, one to protect the students and one to protect the teacher, safety goggles must also be worn and a relevant risk assessment should be carried out as it normally would with other experiments.

Code	Pack	Price
PY2001	Each	£20.65

CHEMICALS

BIOLOGY

CHEMISTRY

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