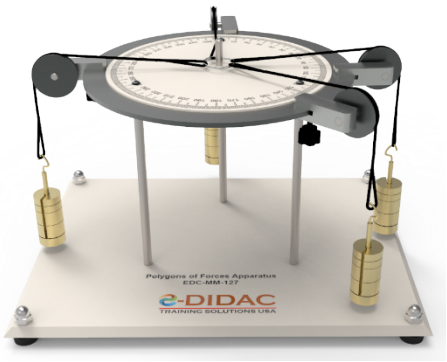
Polygons of Forces Apparatus (EDC-MM-127)

EXPERIMENTAL DATA:

- Practical verification of triangle of forces, polygon of forces and link polygon.
- To verify graphically triangle of forces for three concurrent coplanar forces and polygon of forces for more than three concurrent coplanar forces.
- To resolve by experiment any suitable system of static coplanar forces which may or may not be concurrent.
- To compare the accuracy of the experiment by comparing the experimental and graphical results.



DESCRIPTION:

This apparatus comprises of a sturdy base that supports a circular table above the bench top. The table holds a large protractor and central pin. Moveable pulleys can be secured around the edge of the table. These pulleys can be secured at varying angles. Cords run over the pulleys and secure to a central ring, and Load hanger. The central ring sits over the central pin when the loads are being applied to the hangers. When the central ring is removed from the central pin, the system rests in its equilibrium position, and the lines of action of the forces are recorded by drawing along the weighted cords onto a piece of paper attached to the pulley table.

TECHNICAL SPECIFICATIONS:

- Table top diameter: 300 mm
- Aluminum Pulleys
- 4 Set of Weights
- Adjustable hangers: 4 with pullies

RELATED LAWS:

- Lines of Action
- Link polygon
- Polygons of forces
- Compression
- Concurrent Forces
- Triangle of Forces

SCOPE OF DELIVERY:

- 1 x EDC-MM-127
- 1 x 360 degree protractor
- 4 x Weight Set
- 4 x Load Hanger
- 4 x Pulleys with brackets
- 1 x Instructional Manual

WEIGHT AND DIMENSIONS:

- L x W x H (mm): 350 x 350 x 300
- Weight (approx): 8 kg