

## Friction on an Inclined Plane (EDC-MM-110)

### EXPERIMENTAL DATA:

- To determine the coefficient of friction under static and sliding conditions between various materials and wood
- To verify the friction angle for the material
- To measure the force required to move a body up an inclined plane against gravity and friction
- To show the equilibrium of forces on an inclined plane



### DESCRIPTION:

The compact bench top unit has a sturdy wooden frame. The top wooden frame pivots around a steel hinge to enable any angular position between 0 to 45°, indicated on a protractor scale.

A number of specimen trays are supplied, each having different material. Each tray can be attached to a weight hanger and weights are added to slide observe sliding. Additional weights can be added to the specimen allow broader experimental scope. The hanger cord pulls the tray up the experimental plane. An aluminium pulley with a ball bearing allows for a precise experimental value.

### TECHNICAL DATA:

- Experimental Length: 600mm
- Plane Inclination: 0 to 45°
- Slider tray materials: Aluminum, Brass, Nylon, Steel, PTFE, and Wood



### RELATED LAWS:

- Coefficient of Friction.
- Static and Sliding Friction.
- Angle of Friction.
- Equilibrium of Forces.

### SCOPE OF DELIVERY:

- 1 x EDC-MM-110
- 1 x Load Hanger
- 3 x 5N Weights
- 5 x Sliders
- 1 x Instructional Manual

### DIMENSIONS AND WEIGHT:

L x W x H (mm): 700 x 80 x 50

Weight Approx.: 8kg