

Bell Crank Lever Apparatus (EDC-MM-111)

EXPERIMENTAL DATA:

- To determine the reaction force of a bell crank lever to an applied load
- To demonstrate the effect of different leverage ratio
- To compare moments about the pivot



DESCRIPTION:

This self-contained unit contains a bell crank lever pivoted around a pillar. Different loading points allows the variation in length of mechanical arm, hence, varying the mechanical advantage. A spring balance mounted horizontally at the base of the bell crank lever measures the load transferred. The bell crank lever offers the typical mechanical advantage of a lever, and in addition it turns the line of action of the effort through 90°.

The model is built with acrylic to simulate real crank. This traditional item enables the reaction force of a 90° bell crank to be measured by a spring balance when a load is applied at one of five leverage ratios.

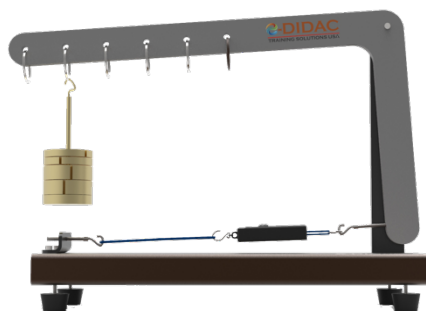
TECHNICAL DATA:

- Steel base with rubber feet
- 90° Bell Crank Lever
- Hanger positions from fulcrum: 200, 250, 300, 350, 400, 450 mm
- Spring Balance: 100N, 0.1N resolution

DIMENSIONS AND WEIGHT:

L x W x H (mm): 450 x 140 x 100

Weight Approx.: 10kg



RELATED LAWS:

- Machines
- Mechanical Advantage
- Levers
- Moment
- Spring balance
- Forces
- Reaction Forces
- Lines of Action

SCOPE OF DELIVERY:

- 1 x EDC-MM-111
- 1 x Load Hanger
- 3 x 5N Weights
- 1 x Instructional Manual
- 1 x Digital Spring Balance