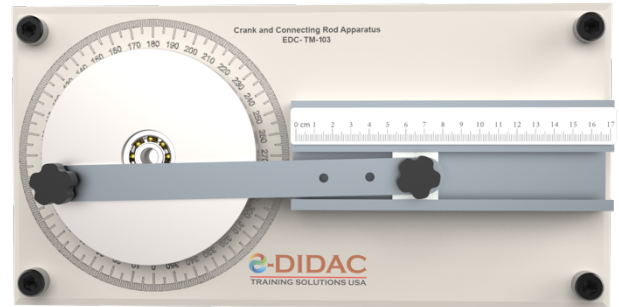


Crank and Connecting Rod Apparatus (EDC-TM-103)

EXPERIMENTAL DATA:

- To determine
 - The relationship between crank angle and stroke
 - The effect of varying the crank radius
 - To study the effect of changing the connecting rod length
- To investigate the relationship between angular and linear speeds and accelerations of the mechanism
- To draw velocity and acceleration diagrams for the mechanism
- Comparison of experimental results with theoretical predictions



DESCRIPTION:

This apparatus comprises of a sturdy wall mount plate on which a rotating crank is mounted along with a connecting rod which converts its motion to oscillatory motion. Angular motion of the crank can be measured with the help of attached protractor.

An input disc houses a crank pin, which can be fixed at various radii across the input disc face.

A linear scale is also attached with the slider to measure the stroke of the slider.

TECHNICAL DATA:

- Crank Pin Radii: 25, 37.5, 50mm
- Connecting Rod Length: 145mm, 170mm, 195mm

WEIGHT AND DIMENSIONS:

- L x W x H (mm) : 400 x 200 x 150
- Weight (approx) : 8kgs

SCOPE OF DELIVERY:

- 1 x EDC-TM-103
- 1 x Instructional Manual

RELATED LAWS:

- Linear Motion to Rotation
- Simple Machines
- Automotive
- Connecting Rods
- Crank, piston, flywheel
- Combustion Engine

