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**Product Name :**  
Oscillating Cylinder Apparatus

**Product Code :**  
LBNY-0005-14000021



#### **Description :**

Oscillating Cylinder Apparatus at the other end of the crankshaft is a slider that runs in a swivelling housing. A linear scale mounted to this housing ensures accurate readings of the piston displacement. On the left of the base is a large rotating protractor scale 'Crank' that rotates on a shaft and bearing arrangement. The increments on the protractor match with an indicator that ensure accurate reading of the angular movement of the scale. Oscillating Cylinder Apparatus a comprehensive instruction manual for lecturer and student, giving full details on apparatus assembly and operation as well as example results. Oscillating Cylinder Apparatus comprises a sturdy base plate, which can be mounted vertically for demonstration purposes or flat for experimental use. Integral to this protractor are varying radius positions used for locating the crankshaft. An input disc can house a crank pin, which can be fixed at various radii across the input disc face.

#### **Technical Specification :**

##### **Experimental Capabilities:**

- To investigate by graphical differentiation the relationship between angular and linear speeds and accelerations of the mechanism
- To construct velocity and acceleration diagrams for the mechanism
- Comparison of experimental results with theoretical predictions
- To determine the relationship between crank angle and stroke
- To study the effect of changing the crank radius.

##### **Specification:**

- The piston axis swivels approximately in line with the connecting rod.
- The crankshaft incorporates a rotating protractor scale 360°, 10° increments

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The bench mounted apparatus consists of an adjustable length crank attached to a connecting rod, which is attached to a sliding piston.

The piston displacement read on a sliding scale, 0 - 100mm, 1mm increments

Crankshaft length adjustment 25mm

Crankshaft radius adjustment 6.25mm

Maximum crankshaft radius 50mm.



**Laboratory Instrument India**