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**Product Name :**  
Angular Acceleration Apparatus

**Product Code :**  
LBNY-0005-14000033



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#### **Description :**

The circular disc and axle are mounted with the axle vertical between pivots, one on the base and one on a radial brace from a vertical pillar. The apparatus consists essentially of a low inertia circular disc mounted onto a vertical axle that can be rotated under the action of a falling mass. The upper surface of the circular disc is scribed with circles of 100 mm, 150 mm, 200 mm and 250 mm diameter and two holes are provided on each circle as sites to locate additional inertia discs. The low inertia circular disc, which is 300 mm diameter and 50.8 mm thick, is manufactured from plywood and is keyed to a 12 mm diameter by 305 mm long stainless steel axle. A 50 mm diameter pulley is attached to the axle.

#### **Technical Specification :**

##### **Experimental Capability:**

Newton's second law applied to a rotational system:

Angular acceleration inversely proportional to moment of inertia

Angular acceleration proportional to torque

Interchange between potential energy and kinetic energy.

Moment of Inertia.

Rate of change of moment of momentum proportional to applied torque

Change in momentum proportional to impulse

Confirmation of parallel axis theorem applied to moment of inertia.

Moment of inertia proportional to mass.



**Laboratory Instrument India**