

Dry, Rough and Lubricating Friction Apparatus (EDC-MM-122)

EXPERIMENTAL DATA:

- To measure the force/torque required to turn a static shaft against gravity and friction.
- To determine the coefficient of sliding friction under different conditions between various materials and disc surfaces.
- To show the equilibrium of forces (between the force of friction and normal force between contacting surfaces) in a rolling system.
- To show how braking/loading force affects effort required and friction coefficient.



DESCRIPTION:

This apparatus consists of a main shaft locked with three identical discs with different surface fixed on to it. One disc is plain (fine machined surface) the second is the same but has a tub underneath that can be filled with a grease or liquid lubricant and the third disc has a rough finish. The main shaft has a pulley fixed on the end to which an effort load can be applied to overcome the normal force between the contacting surfaces.

The apparatus has a braking lever which can be positioned over one of the testing discs at a time. The braking lever has the capacity to hold a variety of test samples made from different materials as well as a roller bearing that is supplied with the unit. Load can also be added to the lever to vary the braking force.

TECHNICAL SPECIFICATIONS:

- Diameter of Pulleys: 125mm
- Diameter of Wheel: 150mm
- Wall mounted apparatus
- Friction Materials
 - Steel
 - Brass
 - Teflon
 - Rubber
- 2 Sets of Weights



RELATED LAWS:

- Friction
- Forces
- Materials

SCOPE OF DELIVERY:

- 1 x EDC-MM-122
- Spare Cord
- 2 x Weight Sets
- 4 x Friction Pads
- 1 x Instructional Manual

WEIGHT AND DIMENSIONS:

- L x W x H (mm): 450 x 250 x 250
- Weight (approx): 18 kgs