# **Bearing Friction Apparatus (EDC-MM-125)**

## **EXPERIMENTAL DATA:**

- To compare the frictional losses of bearings by measuring the coefficient of sliding friction between pairs of materials
- To measure the reduced losses when a ball or roller bearing is used.

### **DESCRIPTION:**

The apparatus consists of a flywheel on a horizontal shaft carried in a pair of similar bearings, the flywheel being used to even out small variations in friction. The shaft is of mild steel, and interchangeable bearings in a range of materials are provided.

For comparison a ball or roller bearing is available to demonstrate the advantages of rolling rather than sliding contact.

Torque is applied by a loaded cord wrapped round the flywheel shaft. A set of calibrated weights and Load hanger is supplied for loading the flywheel.

### **TECHNICAL SPECIFICATIONS:**

- Wheel Diameter: 300 mm
- Bearing material: Stainless Steel, Aluminum, Brass & Teflon
- 1 Set of Weights

### **RELATED LAWS:**

- Automotive
- Friction
- Machines
- Bearing
- Wear
- Torque

### **SCOPE OF DELIVERY:**

- 1 x EDC-MM-125
- 1 x Weight Set
- 1 x Load Hanger
- 4 x Pairs of Bearing Material
- 1 x Set of Ball/Roller Bearings
- 1 x Instructional Manual

#### WEIGHT AND DIMENSIONS:

- L x W x H (mm): 300 x 300 x 320
- Weight (approx): 28 kg





