# Theory of Machines



# Wheel and Axle Apparatus (EDC-TM-110)

### **EXPERIMENTAL DATA:**

- Experimental determination of velocity ratio and comparison with calculated value
- Determination of variation with load of effort
  Determination of variation with load of efficiency
- Equilibrium of moments on pulleys



## **DESCRIPTION:**

The EDC-TM-110 is a wall-mounted apparatus with wheels of two different diameters wheel and has an axle supported on simple pivots in a sturdy wall mounting bracket. Each wheel has a cord wrapped around its perimeter. The cords can be wrapped in either direction around each wheel. A Load hanger can be hanged with each cord allowing application of load and effort on the wheels using the calibrated weights set provided.

#### **TECHNICAL SPECIFICATIONS:**

- Large wheel diameter: Ø150mm
- Small Wheel diameter: Ø75mm
- Recommended Max Load: 100N



#### **RELATED LAWS:**

- Velocity Ratio
- Mechanical Advantage
- Effort
- Effort of Friction
- Efficiency
- Simple Machines

#### **SCOPE OF DELIVERY:**

- 1 x EDC-TM-110 Assembly
- 2 x Load Hangers
- 2 x Weight sets
- Spare Cord
- Instruction manual

#### WEIGHT AND DIMENSIONS:

- L x W x H (mm): 250 x 150 x 250
- Weight (approx): 15 kgs