



## Relation Between Linear and Angular Speed Apparatus (SMT-TM-42)

The stepped shaft is secured to a main shaft, which itself is secured within a bracket. The bracket can be bench or wall mounted. Wrapped around the circumference of each step of the shaft is cord. At the ends of each cord is a single adjustable bob. The adjustment of the bobs can be made to ensure that the starting positions of each bob is the same even though the steps are different diameters. Alternatively the starting position of each bob can be made different. The shaft is rotated by a handle which can be locked by a retaining screw. The angular movement of the shaft and the corresponding linear movement of the weights can be compared.

### TECHNICAL SPECIFICATIONS

#### Specifications:

- Three (3) stepped diameter shaft.
- Diameters  $\varnothing 74\text{mm}$ ,  $\varnothing 49\text{mm}$ ,  $\varnothing 24\text{mm}$ .
- Bob adjustment upwards of 10mm.
- Comprehensive instruction manual provided.
- 2 year warranty.

#### Experimental:

- To find the relationship between angular rotation and the peripheral movement of the stepped shaft.
- Compare actual results with theory.

