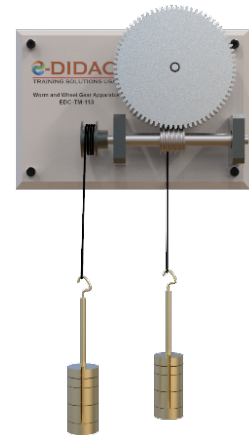


## Worm and Wheel Gear Apparatus (EDC-TM-113)

### EXPERIMENTAL DATA:

- Determination of velocity ratio, Torque and Friction
- Demonstration of self-locking mechanism in worm and wheel gear
- Determination of mechanical efficiency



### DESCRIPTION:

Worm gears are helical rolling gears that are categorized as transmission or conversion elements within machine elements.

This type of gear system contains a driving worm and the driven worm wheel. Worm gears are quiet and have a damping effect. They are smaller and easier to operate than spur gears or bevel gears of the same performance and gear ratios.

This wall-mounted experimental unit can be used to study their torque ratios and efficiency. The transmission ratio of the gear can be determined.

### TECHNICAL SPECIFICATIONS:

- Worm wheel Wheel diameter:  $\text{Ø}120\text{mm}$
- Worm shaft diameter:  $\text{Ø}40\text{mm}$
- Center Distance: 80mm

### RELATED LAWS:

- Mechanical Advantage
- Effort
- Automotive
- Efficiency
- Simple Machines

### SCOPE OF DELIVERY:

- 1 x EDC-TM-113 Assembly
- 2 x Load Hangers
- 2 x Weight sets
- Spare Cord
- Instruction manual

### WEIGHT AND DIMENSIONS:

- L x W x H (mm): 250 x 160 x 180
- Weight (approx): 15 kg