



### Features

Tesca Wheel and Axle Apparatus has dual diameter wheel has an axle supported on simple pivots in a sturdy wall mounting bracket. Each wheel has a cord wrapped around its periphery. The cords can be wrapped in either direction around each wheel. A load hanger is added to each cord allowing loading of the wheels using the calibrated weights set provided.

Using the hangers and weights allows the experimental determination of velocity ratio and comparison with calculated values. Students can also determine the variation of effort with load and the variation of efficiency with load.

A comprehensive instruction manual for lecturer and student, giving full details on apparatus

Note: Specifications are subject to change.

### **Tesca Technologies Pvt. Ltd.**

IT-2013, Ramchandrapura Industrial Area, Sitapura Extension,  
Near Bombay Hospital, Vidhani Circle, Jaipur-302022, Rajasthan, India,  
Tel: +91-141-2771791 / 2771792; Email: info@tesca.in, tesca.technologies@gmail.com  
Website: www.tescaglobal.com

assembly and operation as well as example results. All necessary assembly and operational tools are provided

### Specifications

- Wall mounted apparatus for investigation of the mechanics of simple wheel and axle machine
- Supplied with wall mounting bracket, wheel and axle machine, cord pulleys and load hangers
- Wheel diameter#1 =  $\varnothing 138\text{mm}$
- Wheel diameter#2 =  $\varnothing 68$
- Set of weights
- Comprehensive instruction manual provided

### Experiments

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

### Operating Conditions

- Operating environment:
  - \* Laboratory
- Storage temperature range:
  - \*  $-25^{\circ}\text{C}$  to  $+55^{\circ}\text{C}$  (when packed for transport)
- Operating temperature range:
  - \*  $+5^{\circ}\text{C}$  to  $+40^{\circ}\text{C}$
- Operating relative humidity range:
  - \* 80% at temperatures  $< 31^{\circ}\text{C}$  decreasing linearly to 50% at  $40^{\circ}\text{C}$