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**Product Name :**  
Spur Gear Lifting Machine

**Product Code :**  
LBNY-0005-14000027



#### **Description :**

The three Spur Gear Lifting Machine supplied include a driver having 40 teeth, a driven wheel with 120 teeth and an intermediate gear of 40/120 teeth compound. The pulleys mounted to some of the gears can be used for either single or double purchase experiments. A vertical stand incorporates a back plate which carries a number of spur gears on shafts to enable single, double or three stage gear trains to be assembled. The driver and driven wheels have integral pulleys around which cords are wrapped to act as 'EFFORT' and 'LOAD'. The lifting machine can be set-up as a two gear or three gear train. Cords, hangers and a set of weights are included to provide drive to the gear trains and to determine ratios, mechanical advantage and efficiency.

#### **Technical Specification :**

##### **Experimental Capabilities:**

- To determine the efficiency for a range of applied loads
- To determine the 'EFFORT' for a range of applied loads
- To determine the effect of friction for a range of applied loads
- To compare the experimental results with calculated values
- To establish the law of the machine and the limiting value of its efficiency
- To compare the results with the machine set up with single and double purchase.

##### **Specifications:**

- Compound gear containing 40 and 120 tooth gears
- Effective diameters of pulleys  $\text{Ø}75\text{mm}$
- 40 tooth driver
- 120 tooth driven wheel

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Cords and load hangers apply load and effort  
Comprehensive instruction manual provided.  
Set of slotted, calibrated weights included.



**Laboratory Instrument India**