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**Product Name:**Geared Systems

Product Code: LBNY-0005-14000012



## **Description:**

The dynamic tests run the input of the different drive units at a given speed using a motor, while measuring the input power. At the same time, a dynamometer loads the output of the drive unit while measuring the output power. A bench-mounting base unit forms the main part of this set of products. Supplied with a three-shaft gear drive unit as standard, the base unit dynamically tests the gear drive and the other optional drive units. Includes simple tools needed to fit the drive units to the base unit, and to adjust the compound gear drive. In the base units upper level, the student fits their choice of drive unit. Students use the measurements to find the performance and efficiency of the drive unit. Students may set the gear unit (supplied) as a simple or compound drive by sliding a gear in or out of mesh on the third shaft. A variable-speed, low-voltage motor provides the shaft input turning force (effort) to the drive. A dynamometer provides the output braking force (load) to the drive. Fans provide air cooling for both the motor and dynamometer. Flexible couplings with collets connect the drive unit to the motor and dynamometer for quick and accurate alignment. The dynamometer uses electromagnetic braking and a hysteresis effect to provide a variable load at a constant torque irrespective of the speed. Sensors on the motor and dynamometer measure their shaft speed, torque and therefore power in and out at the drive.

## **Technical Specification:**

Test Stand: 400 mm x 500 mm high x 200 mm with Storage tray fitted. 9 kg plus 1 kg of weights. Nett dimensions and weights: Base Unit: 600 mm x 600 mm x 350 mm high and 32 kg with gear drive fitted.

## **Laboratory Instrument India**

