

**Product Name :**  
EPICYCLIC GEAR TRAIN AND HOLDING TORQUE  
APPARATUS

**Product Code :**  
Theory of Machine0002



## Description :

EPICYCLIC GEAR TRAIN AND HOLDING TORQUE APPARATUS

## Technical Specification :

The unit consists of an epicyclic gear train. Gear train consist of an internal gear having 56 teeth two planet gears with 21 teeth each and sun gear having 14 teeth. The train is driven by a 3-ph/1-ph, 1440 R.P.M. motor giving maximum input torque of 0.5 kg/m. The planet carrier carries the planet gears. The internal gear is mounted over a flange which rotates in bearings. A pulley is mounted over a output shaft of internal gear. Torque measurement arrangement with spring balance is provided for both the internal gear and planet carrier, so that either or then can be held stationary and holding torque required for stationary member and output torque for the other member can be measured. The whole unit is mounted over a sturdy frame. Motor current is calibrated for output torque of the motor. A three channel R.P.M. indicator (digital) can be supplied with the unit at an extra cost which enables to determine the angular velocities of all the members. A digital torque indicator for motor output torque can be supplied at an extra cost, instead of motor current calibration.

## SERVICE REQUIRED:-

- Single Phase 15amp Electrical Connection.
- Floor space of about 1.5m. X 2m.

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