

TOM-011 EPICYCLIC GEAR TRAIN APPARATUS



RANGE OF EXPERIMENTS TO BE CARRIED OUT:

1. To calculate the holding torque of epicyclic gear train.
2. To calculate the efficiency of gear train

TECHNICAL DESCRIPTION:

The Epicyclic gear train Assembly is held between a Plummer / Bearing Block & Prime mover. In continuation with the output shaft, a Flat Surface Pulley is linked. Again this pulley is held between two Plummer / Bearing Blocks. To apply load or torque on the output of Epicyclic gear train Assembly, friction mechanism is used. Good quality Brake lining is fitted on a half-round plate. And this plate with necessary supports, is placed on the top of the Flat Surface pulley. With the help of this arrangement, one can place load plates or weights, to generate friction Torque. Body of the Epicyclic Gear Train is linked to Tension Indicators (mechanical type). And suitable frame is mounted to hold these Tension Indicators. Two such tension indicators are linked to two arms, which are linked with gear train body.

Total components including Motor & a Epicyclic Assembly, are mounted on a suitable & sturdy mechanical frame. Proper guard is provided for rotational parts, from safety point of view.

Good lay out based Electrical Control Panel is provided along with, so as to exert suitable control on the apparatus. All set up is provided with powder coated finish, from aesthetic & durability point of view. Necessary arrangements like foundation drilling are also provided.

DIMENSIONS AND WEIGHT :

Size :1.0 m.(L)x 0.7 m(W) X 0.7m (H)

Weight :Approx. 65 Kg

SERVICE REQUIRED :

230 v Ac Supply 50 Hz

SCOPE OF DELIVERY:

1. Experimental Setup
2. Instructional Manual

OPTIONAL FACILITY: Data logging Facility

.