

UNIVERSAL GOVERNOR APPARATUS

The set-up is designed to study the working of different governors normally used to control the speed. It consists of a main spindle, mounted vertically on the base plate. This spindle is driven by a variable speed Motor which is also mounted vertically on the same base plate. Any one governor assembly out of four can be mounted on spindle. The spindle speed is controlled by speed control unit. A graduated scale is fitted to the sleeve to measure the displacement.

SCOPE OF EXPERIMENTATIONS:

- Determination of characteristic curve of a sleeve position against speed of rotation for all governors.
- To study the effect of varying the mass of the center sleeve in Porter and Proell Governor.
- To study the effect of varying the initial spring compression in Hartnell Governor.
- To study the determination of characteristics curves of radius of rotation against controlling force (Actual & Theoretical) for all governors.

UTILITIES REQUIRED:

- Power Supply
- 230VAC, Single Phase.
- Floor Space
- 1.5x1.5m
- Tachometer to find out RPM.



TECHNICAL DETAILS:

- **Spindle**
- Material : S.S.
- Governor Mechanism : Four different types of governor mechanism with spring and weights.
- Watt Governor
- Porter Governor
- Hartnell Governor
- Proell Governor
- Motor : Variable speed, Standard Make, FHP Motor.
- Control Panel : For speed control of motor.