

Mechanical Measurement and Metrology Lab

Subject overview:

With the growing trend of shorter product cycle and quality product, there are increased concerns for quick and sophisticated metrology & measurement systems in designing and manufacturing different engineering products, so developing Laboratory is one of prime and important task for Mechanical and Automobile Engineering department. Our goal is to develop Laboratory that benefits its stake holders – students, faculties, industries, etc.



CALIBRATION OF THERMOCOUPLE

It is used as temperature sensor. It consists of different types of thermocouples, constant temperature bath for Hot & Cold junction, Digital temperature indicator, Glass Thermometer



STRAIN MEASUREMENT BY USING STRAIN GAUGES

Strain measurement with the help of resistance wire strain gauges weights, 3.5 digit digital strain indicator with amplifier for strain gauge bridge circuit. Accessories include a cantilever beam mounted with strain gauges, weights for the bridge circuits.

VIBRATION MEASUREMENT BY STROBOSCOPIC METHOD

The motorized disc is of aluminum sheer having 12 equidistance slots, fit in universal electric motor working on 220 V. AC/DC. Mains connection for reversing motions of discharge also provided with suitable rheostat to regulate the speed of motor revolution, converter & necessary operating switches.



Metrology Lab(Mitutoyo)

Understanding the objective and need of Metrology in engineering, laboratory has been designed and developed in such a way that it provides knowledge and training of measurement principles by measuring different dimensions using fundamentals of arithmetic, geometry, trigonometry and algebra concepts, to Mechanical and Automobile Engineering students.

Metrology Lab Instruments

Metrology lab consists of Vernier calipers, Micrometers, Gear tooth Vernier caliper, Vernier Height Gauge, Micrometer Depth gauge, Sine Bar, Spirit level, Surface plates, Slip gauges, etc.

