

## **INSTRUMENTATION AND CONTROL SYSTEMS LAB**

### **LIST OF THE EQUIPMENTS**

- 1) Pressure Gauges**
- 2) Transducer for Temperature Measurement**
- 3) LVDT Transducer for displacement Measurement**
- 4) Strain Gauge for the Measurement of Strain**
- 5) Thermocouple for Temperature Measurement**
- 6) Capacitive Transducer for Angular Measurement**
- 7) Resistance Temperature Detector for Temperature Measurement**
- 8) Rotameter for flow measurement**
- 9) Photo and Magnetic Speed Pickups for the measurement of speed**

Name of the Equipment:

Pressure Gauge Transducer



**Specifications:**

- 230V/50HZ AC supply

**Experiments that can be conducted:**

- 1) To determine the calibration of pressure gauge

**Name of the Equipment:**

## **Transducer for Temperature Measurement**



### **Specifications:**

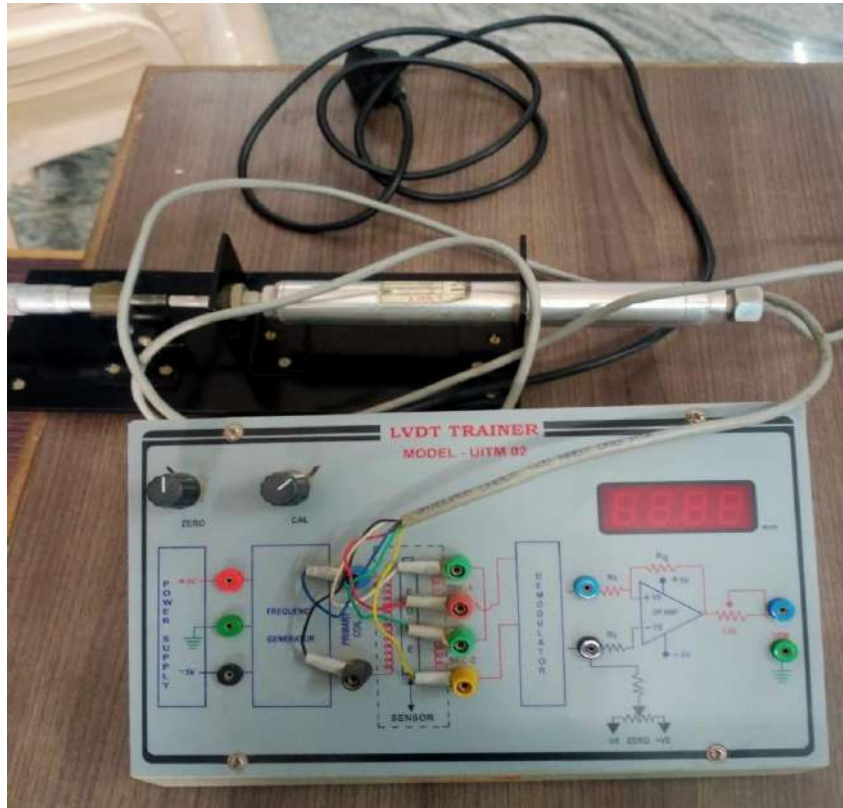
- PT 100
- Resistance value:100 ohm at 00c

Experiments that can be conducted:

Calibration of Transducer for Temperature Measurement

Name of the Equipment:

## LVDT Transducer



### Specifications:

- Micrometer resolution 0.001mm

### Experiments that can be conducted:

- 1) To determine the calibration of LVDT

Name of the Equipment:

## Strain Gauge



### Specifications:

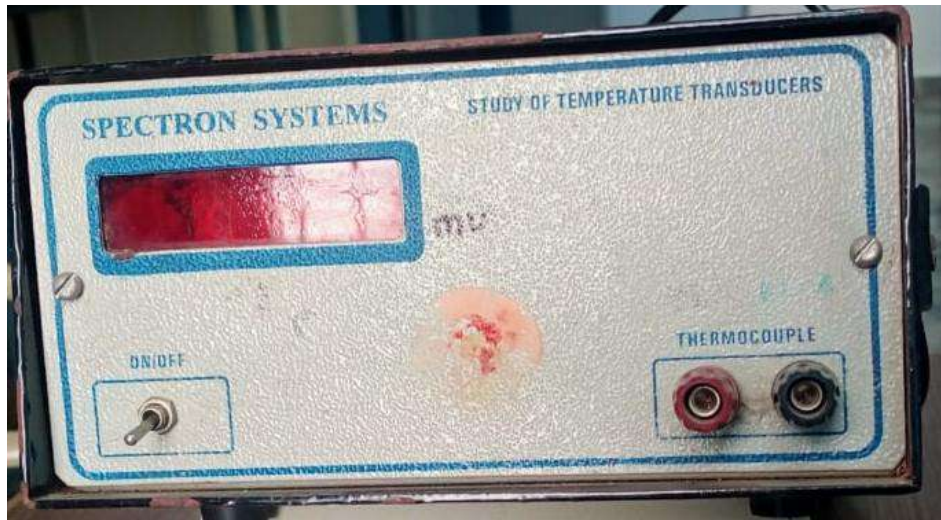
- Cantilever beam 1kg capacity,width-45mm,length-355mm,thicknessof the beam-3mm

### Experiments that can be conducted:

- 1) To determine the calibration of strain gauge for force measurement

**Name of the Equipment:**

## Thermocouple for Temperature Measurement



### Specifications:

- Thermocouple probe j-type

### Experiments that can be conducted:

- 1) To determine the calibration Thermocouple for Temperature Measurement



Name of the Equipment:

## Capacitive Transducer



### Specifications:

- Angular displacement  $0^{\circ}$  to  $180^{\circ}$

### Experiments that can be conducted:

1. To determine the Capacitive Transducer for Angular Measurement

**Name of the Equipment:**

## **Resistance Temperature Detector**



### **Specifications:**

- Thermocouple range 0<sup>0</sup> to 150<sup>0</sup>

### **Experiments that can be conducted:**

1. To determine the Calibration of Resistance Temperature Detector for Temperature Measurement



**Name of the Equipment:**

**Rotameter**



**Specifications:**

**Experiments that can be conducted:**

- 1) To determine the calibration of rotameter

**Name of the Equipment:**

## Photo and Magnetic Speed Pickups



**Specifications:**

**Experiments that can be conducted:**

To determine the calibration of Photo and Magnetic Speed Pickups