



Pressure Measurement Bench (SMT-HT-01)

This experimental setup used to measure pressure with Manometers, Bourdon gauges and Pressure Transducers which are fundamental pressure-measuring devices. Pressure Measurement Bench enables students to fully investigate and compare the operation and characteristics of inclined and U-tube manometers, and Bourdon-type vacuum and pressure gauges. It also includes a separate Bourdon gauge with dead-weight calibration apparatus. This setup also has Pressure Transducer with digital display for advance pressure measurement in Modern control systems.

TECHNICAL SPECIFICATIONS

Specifications:

- U-tube and inclined tube manometer. One Bourdon tube pressure gauge each for positive and negative pressure. One Pressure Transducer with digital display.
- Plastic syringe generates test pressures in the millibar range.
- Calibration device (Dead weight tester) with Bourdon tube pressure gauge.

Technical Data:

- Inclined tube manometer: angle 30°.
- Measuring ranges:
 - Bourdon tube pressure gauge: 0 to 300mbar / -100 to 0mbar.
 - U-tube manometer: 0 to 500mmWC. And Inclined tube manometer: 0 to 500mmWC.
 - Pressure Transducer: 0 to 1000mBar
- Dead weight Pressure Calibrator included
- Air compressor Unit (Optional)

Experimental Data:

- Comparison of pressure measurement by manometer, Bourdon gauges and Pressure Transducer.
- Calibration of a pressure gauge.

