



Sciencetech 2434T Dead Weight Tester (DWT) is an instrument that is used to calibrate pressure gauges. It basically works on the pressure balance principle with calibrated weights used to apply pressure to an area. When the pressure balance reaches zero, the pressure device under test is considered calibrated. DWT provides high accuracy in pressure gauge calibration and prevents the occurrence of an error in pressure reading.

Features

- High accuracy Dead Weight Tester.
- Reliable, economical and durable.
- Easy to operate.
- Screw pump handle which permits easy and accurate setting of pressure.
- Set of weights are directly marked in convenient values of pressure and are easily stacked on the weight carrier which is placed on to the free piston.
- The calibration is provided in unit of pressure measurement namely kgf/cm^2 .
- Different type of gauge adaptors are provided for connecting the gauge to be tested.
- Robust construction allows for repeated daily use.

Scope of Learning

- Study of calibration of various pressure gauges.
- Study of working of hydraulic based calibration systems.

Application

- Automobile industry
- Pipe manufacturers
- Metals industry
- Cement industry
- Electronics industry
- Paper industry

Technical Specifications

Dead Weight Tester

Range : 0.4 to 40kg/cm²

Step size : 0.1kg/cm²

Standard parameters

- Gravity : 9080665 m/s²
- Air density : 1.159087 Kg/m³(for low pressure), 1.155872 Kg/m³(for high pressure)
- Operating fluid : Hydraulic oil (multi grade mobile oil)

Material of construction

- Piston : HCHCr / tungsten carbide
- Cylinder : HCHCr / tungsten carbide
- Base instrument : MS painted
- Pipelines : Stainless steel
- Weights : Stainless steel / MS phosphate black

Environmental conditions

- Temperature : 23°C +/- 1°C
- Humidity : 50% +/- 10%

Accessories

- Storage box for weights
- Set of spare seals
- Dust cover
- Tin of oil (500ml)
- Adaptors : M20 x 1.5, 1/4" BSP & 3/8" BSP
- Standard tool kit including spanners, allen key, screw driver, spirit level