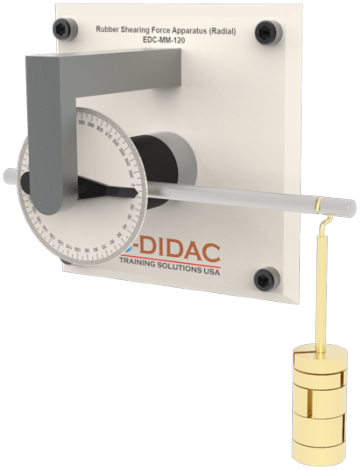
# Radial Rubber Shearing Force Apparatus (EDC-MM-120)

## EXPERIMENTAL DATA:

- To fins the relationship between shear stress and shear strain.
- To find the modulus of rigidity of the rubber cylindrical block.
- To determine the variation of rotation with applied load.



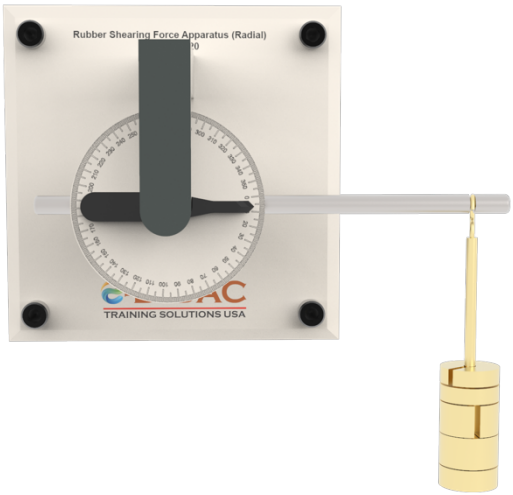

## DESCRIPTION:

This experimental unit demonstrates the relationship between shear loading and shear deformation to be determined using simple experiments. A cylindrical rubber block between two cylindrical pieces of aluminium is used as the shear body. A protractor measures the deformation that occurs. The unit can be mounted to the wall using bolts. Load can be applied via an arm elongated out of the steel block.

Rubber blocks in shear force are often used to damp vibrations. Shock energy of vibration is absorbed by the rubber block. The deformation leads to a decrease in cross-section as the block lengthens, an effect described by Poisson's Ratio. This unit enables the user to understand the behavior of a very flexible material such as rubber.

## TECHNICAL SPECIFICATIONS:

- Rubber Block Length: 75mm
- Rubber Block Diameter: 50mm
- Angle of rotation measurement disk.




## RELATED LAWS:

- Vibrations
- Forces
- Materials
- Stress and Strain

## SCOPE OF DELIVERY:

- 1 x EDC-MM-120
- 1 x Weight Sets
- 1 x Instructional Manual

## WEIGHT AND DIMENSIONS:

- L x W x H (mm): 200 x 200 x 150
- Weight (approx): 2 kgs