



Drum Brake Friction Apparatus (SMT-MM-40)

The table unit is used for investigating a drum brake. The objective is to determine the coefficient of friction. A ball bearing mounted anodised aluminium drum is driven by a rope around its circumference loaded with weights. A further weight operates the ball bearing mounted eccentric cams via a rope and thus the brake shoes in the drum. A direct comparison of braking force to driving peripheral force is thus possible. The difference between a leading and trailing brake can be simply demonstrated by reversing the direction of rotation.

TECHNICAL SPECIFICATIONS

Specifications:

- Experiment on the friction forces in a drum brake with leading and trailing shoes.
- Direct comparison of braking and peripheral forces.
- To have drum torque and braking load applied by weight hangers and cords
- Used in the determination of coefficient of friction
- Usage of an industrial brake shoe.
- Brake drum mounted on ball bearings id 180mm, od 190mm, anodised aluminium.

Technical Data:

- Brake drum: id 180mm, od 190mm.
- Brake shoes: industrial automotive accessory.
- Set of weights: 2x up to 20N. steel, galvanised.
- Brake cams mounted in ball bearings.
- L x W x H 340x160x280mm.

Experimental Data:

- To determine experimentally the variation of tangential force with braking load
- To obtain the coefficient of friction between the aluminium drum and the brake shoe
- To compare leading and trailing shoes

