

## Fundamental of Statics Apparatus (SMT-MM-00)

This unit used to study principles of statics such as the equilibrium of forces and moments, resolution of forces, the law of levers, and more. This is table mount compact unit. All parts required for the experiment can be quickly attached to the rails around the edges. The imprinted line grid and grid-marked lever rods permit precise assembly. The lengths marked on the grid make it easy to define angles. A wide range of mountings, such as cables, rods, pulleys, torque disks, pivot bearings and the like, can be easily fixed in place and combined. Ball bearings integrated into the panel permit low-friction torque experiments. Force gauges are particularly well suited to demonstration purposes.

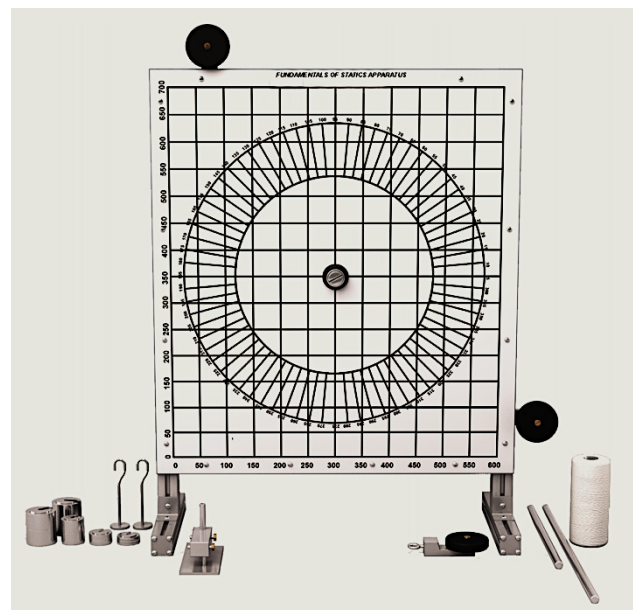
As a special teaching aid, it is possible to write directly on the panel with erasable markers. Markings, sketches and comments can be added to supplement the experiments. All parts are clearly laid out and well protected on a storage system.

Three supplementary sets are available to extend the scope of experimentation, providing additional experiments relating to the inclined plane, friction, pulley blocks and gear wheels.

### TECHNICAL SPECIFICATIONS

#### Specifications:

- The compact table top unit.
- The experimental setup to demonstrate simple, planar force systems
- The panel with rails around the edges for easy mounting of various experimental components
- The panel with imprinted 50mm line grid and facility to write on using erasable marker
- Lever rods with 50mm grid
- Wide range of mountings: cables, rods, pulleys, torque disks, pivot bearings and the like
- Force gauges for tensile and compressive forces
- Storage system to house all parts
- 2 weight sets.
- Spring balance.
- Detailed Instructional Manual Included.



**Technical Data:**

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- Panel:
  - Width= 600mm
  - Hight= 700mm
  - Line Grid spacing = 50mm
  
- Set of weights:
  - 5N Hanger QTY=02
  - 5N weights QTY=06
  
- Force gauges for tensile and compressive force
  - Measuring Range: 100N
- Panel LxWxH: 600x100x700mm
- Storage system LxWxH: 600x400x150mm
- Weight: approx. 30kg (total).

**Experimental Data:**

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- Accumulation and resolution of forces with force parallelogram.
- Equilibrium of forces.
- Law of levers, determination of moments and equilibrium of moments.
- Combined lever systems.
- Deflection and resolution of force by fixed and free pulleys.
- With optional supplementary sets.
- Inclined plane; for friction experiment.
- Pulley blocks.
- Gear wheels.