

## MM 240 SIMPLE GEARED SYSTEM



### GENERAL DESCRIPTION

The system is for studying the acceleration of a gear system under different gear ratios.

The system consists four parallel shafts with fixed and sliding gears and supported by self aligned ball bearings on a base frame. Each pair of adjacent shafts has two transmission ratio, providing 8 different gear ratios between the first and the last shaft. Inertia mass with torque drum is attached to each shaft. A chord wound around a drum and the weight hanger provides a means of applying a torque. The gear system is attached to a wall supported on two legs for weight hanger travel. By timing the fall of the weight hanger, the acceleration of the system can be calculated. A sprocket and lock pin, and a winding handle are provided for raising the weights. All gears are enclosed in a casing with a transparent cover for safety.

### TYPICAL EXPERIMENTS

- Inertia of a mass and of a geared system.
- Efficiency of a geared system.

### TECHINCAL DATA

- Shafts : 4 ea.
- Inertia masses : 4 ea.
- Gear : Spur gear.
- Maximum gear ratio : 64 : 1.
- Chord with measuring tape : 1 set.
- Stop watch : 1 ea.
- Weight hanger : 1 ea.
- Weights : 1 lot.
- Accessories : Rubber pad and stop watch

Net (unpacked) shipping dimensions WxLxH : 80 x 30 x 110 cm  
Net weight : Approx. 65 kg