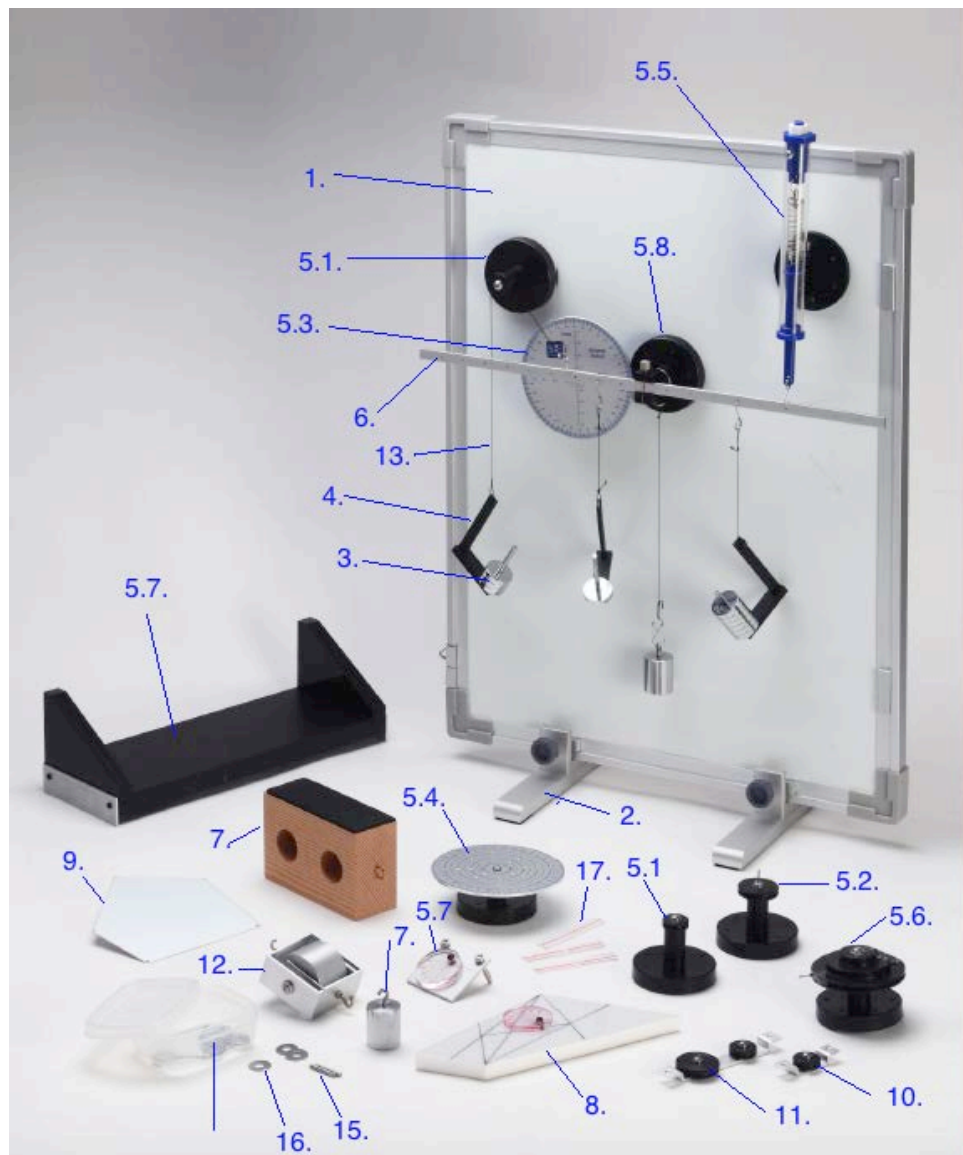


## F01 Mechanics of machinery set



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### ***Experiments:***

1. Static equilibrium forces combination, force decomposition.
2. Torque balance- parallel force of plummet, lever experiment on the different/same side, multiple torque, wheel & axle, the center of mass & gravity.

- 3 Force of inclination-maximum static friction, coefficient of static friction, coefficient of dynamical friction and pulley system.
- 4 Pulley- single/double sheave pulley, the comprehensive experiment of pulley.
- 5 A variety of comprehensive experiments for practical application.
- 6 Hooke's law.
- 7 Single Pendulum.

***Specifications:***

1. Magnetic whiteboard 40cm x 53 cm x1
2. Aluminum legs for fix whiteboard x2
3. Weight group 20g x10
4. Metal mass hanger x3
5. Magnetic mounting set with durable plastic structure and fixed 6 **NdFeB magnets**
  - Precision Pulley with bearing  $\phi=16\text{mm}$  x2
  - Precision Pulley with bearing  $\phi=27\text{mm}$  x1
  - Aluminum Degree scale  $\phi=100\text{mm}$  x1
  - Aluminum Torque wheel  $\phi=100\text{mm}$  x1
  - Accurate force scale 250g/2.5N X1
  - Three step pulley with bearing  $\phi=20/40/60\text{mm}$  x1
  - Inclined plane L=28cm with angle indicator x1
  - Lever fixer x1
6. Aluminum lever L=40 cm and every 2 cm have a small hole for pendant use. X1
7. Friction wooden block one side with EVA sheet , 11x7x4cm with two couch for two 100g weights x1
8. Plastic stabilizer plate with angle indicator x1
9. Five-sided metal plate x1
10. Single pulley x1
11. Double pulley x1
12. Removable block 153g x1
13. Fishing thread x1

- 14. Ring x1
- 15. Metal ping x4
- 16. Metal hook x3
- 17. Vertical guage x3