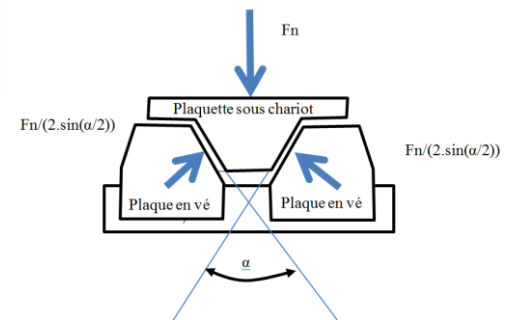
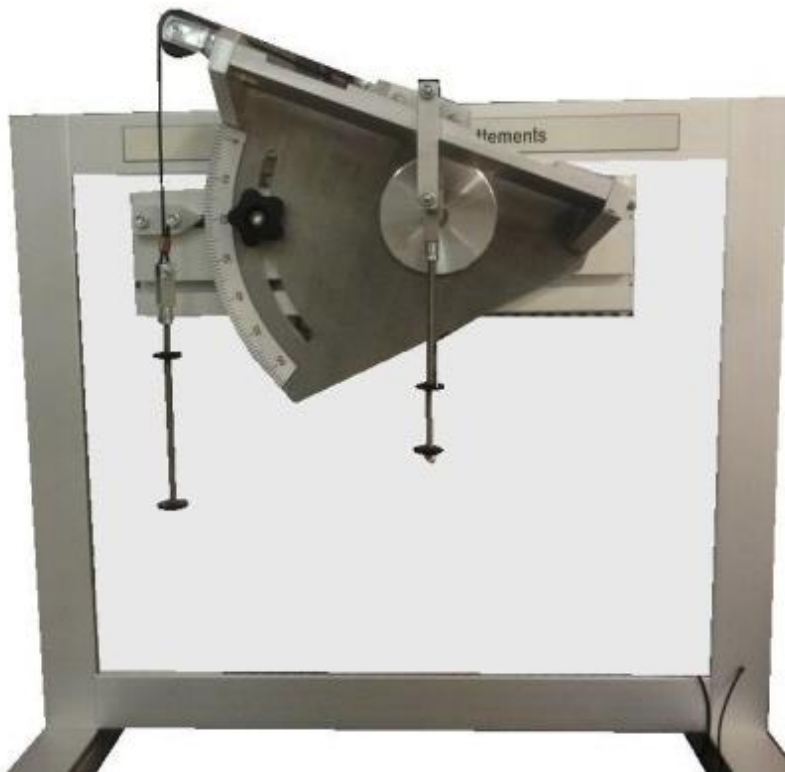


FRICITION STUDY UNIT



Experimental capabilities

- Study of friction in the case of friction between solid / solid materials according to an adjustable angle of inclination
- Determine the relationship between the normal force and the friction force
- Evaluate the coefficient of static friction for different materials
- Study of friction in the case of V-shaped friction surface on a tilting plane (friction plates with V-shaped for different angles)
- Friction study in the case of wheels (steel, aluminum, ball bearing) on a tilting plane

Operating principle

The MEC050 equipment is an experimental bench designed to understand the phenomenon of friction between solid / solid materials.

This bench allows to experiment among other things friction:

brass, polished or rough steel on steel or aluminum

The effects of jamming

Rolling resistance

The coefficient of static friction can be evaluated on this bench

In no case is it expected that this equipment will be able to conduct precise measurement and characterization of the friction coefficients.

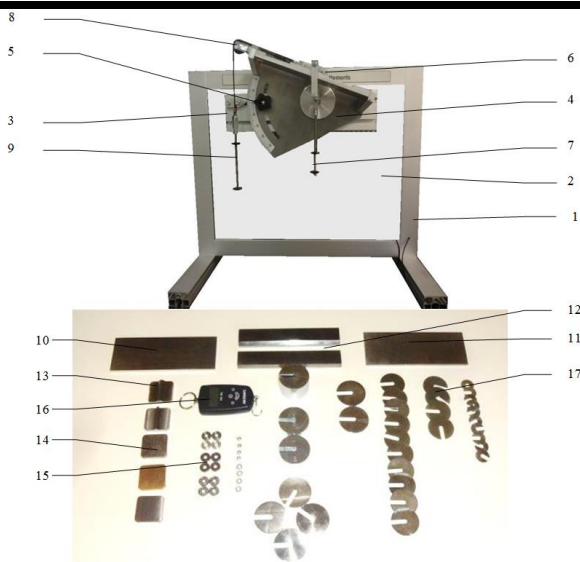
The robust design of this equipment makes it perfectly suitable for use in schools.

Its anodized aluminum structure on wheels gives it great robustness as well as great flexibility of integration in your premises.

The manufacturing of this equipment meets the European machine directive

This equipment can be used alone or combined with other compatible equipment from our range (see last part of this document).

Illustrations



Technical details

1. Anodized aluminum structure
2. Perforated grid for mounting
3. Tilting tray support module
4. Tilting tray
5. Tray tilt adjustment wheel
6. Friction test cart (130g mass)
7. Weight support for normal load application (mass 110g)
8. Cord return pulley for application of tangential force
9. Weight support for application of tangential force (mass 50g)
10. Aluminum friction plate
11. Steel friction plate
12. Friction plates with 90 ° and 20 ° wedge Vee
13. Friction plate with wedging vee (one at 120 ° - mass 64g and one at 90 ° - mass 71g)
14. Flat friction pads (brass - mass 100g, polished steel - mass 87g and rough steel - mass 87g)
15. Friction wheel (3 aluminum, 3 steel, 3 ball bearings)
16. Digital dynamometer
17. Weight set (0.01N * 10, 0.05N * 4, 0.1N * 10, 0.5N * 2, 1N * 4, 2N * 2, 5N * 1)

Services required

- Dimensions: (LxWxH mm): 560 x 410 x 560
- weight (Kg): 15

Note : if the equipment installation is operated by our staff, all supplies and exhaust connections required must stand at less than 2m from the machine

Documentation

- User's manual
- Pedagogical manual
- Technical documentation of the components
- Certificate of conformity CE