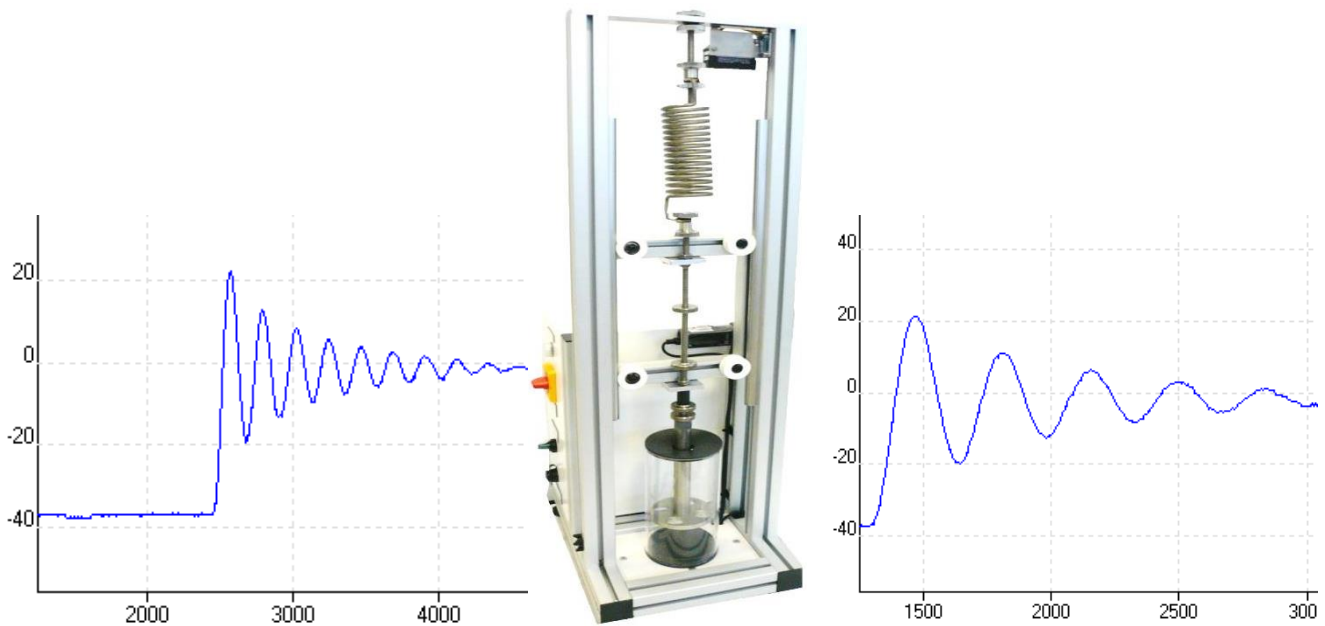


FREE RUNNING OSCILLATIONS STUDY UNIT



Experimental capabilities

- Study of a simple system mass / spring
- Study of a mass system / spring / damper
- Determination of a damping factor
- Use of a multi-functions exploitation software

Operating principle

The bench BEV010 is a bench designed to the study of free oscillations of a system mass / spring or mass / spring / damper

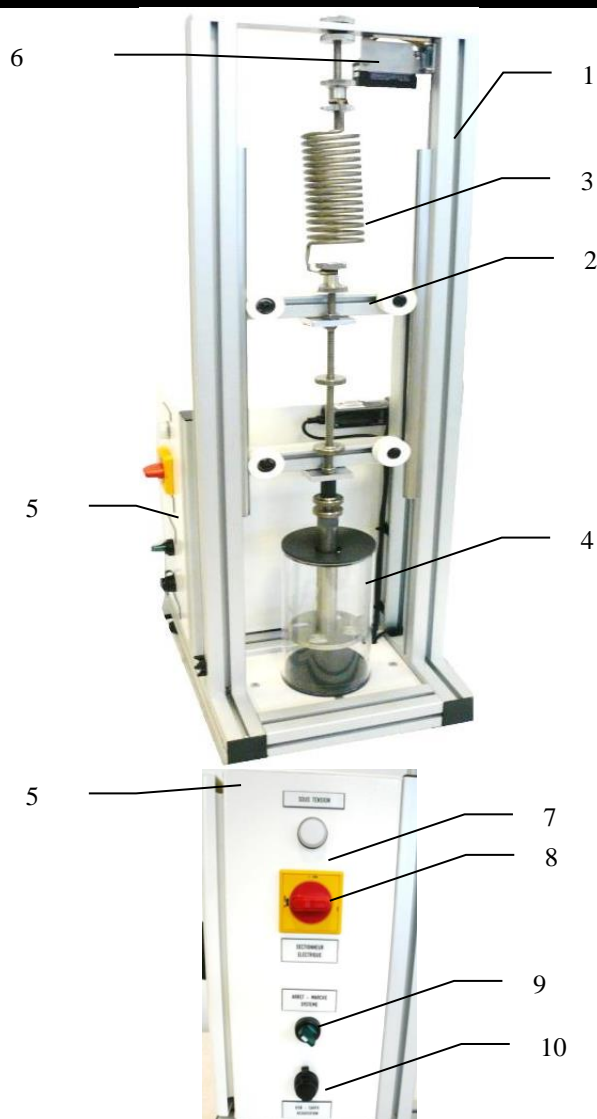
The system comes with 3 interchangeable springs and a set of modular masses in order to create a large number of test cases. A removable and adjustable damper positioned in the lower part also allows to explore underdamped areas or on critical damping.

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

The equipment has a laser measurement system, allowing the retransmission of carriage position measurements on an acquisition card (acquisition card included in the electrical box / connection on PC via USB port).

The manufacturing of this equipment meets the European machine directive

Illustrations



Technical details

1. Aluminum chassis profiles
2. Mobile carriage guided by 4 track rollers on rails supporting in its central part the detachable masses for varying the overall mass of the movable part of the oscillator. (1 set of 5 masses provided)
3. Spring (1 set of 3 springs of different stiffness is provided)
4. Transparent damper (detachable and adjustable)
5. Electrical box (see details below)
6. Contactless Laser position sensor (transcript of carriage position measurement towards the integrated acquisition card to the electrical box of the machine).
7. Indicator light on
8. General electrical disconnecter - lockable
9. Commissioning switch of the machine
10. USB Socket for data acquisition (acquisition card integrated to the electrical cabinet/ USB cable provided)

Services required

- Electrical supply : 230 Vac – 50 Hz – 1 A
- Electrical network : 1 phase(s) + Neutral + Earth.
- Dimensions: (LxWxH mm): 500 x 400 x 1100
- weight (Kg): 30

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
- Configuration files and software
- Certificate of conformity CE