

## Product Name : Fatigue Testing Unit

## Product Code : CHINAELABC3200005



## **Description :**

**Fatigue Testing Unit** 

## **Technical Specification :**

With this unit, it is possible to determine the basic principles of the fatigue strength testing.

On the lower panel of the unit, it is fixed an electric motor which axis is joined to an end of the test specimen (test bar) by means of a coupling. As well, this axis has a disc, which by means a device will count the number of turns of the motor.

On the panel's right side, it is placed the system with which the test specimen is loaded. This system is composed by a sping balance, which is joined to a threaded spindle by its upper end, while on its lower side, it is joined to an articulated guided system, in which it is held the right side of the test specimen. When turning the threaded spindle clockwise, we transmit a vertical force upwards to the test specimen.

The applied force can be directly measured using the spring balance.

In order to guarantee the force verticality, the system has two guides to avoid horizontal displacements during the transmission of stress.

Both the area where the test specimen is located and the motor axis outcome are covered with a protection cover, without it the unit does not work, since it is provided with a safety system to avoid accidents.

On the upper panel, the unit control box is mounted, containing: the main (on/off) switch of the unit; the cycle counter that shows us the quantity of turns the motor's axis carries out; the motor's speed control that permits us

increase or diminish the turning speed of the electric motor; the motor speed display that shows us the frequency in Hz, which is being transmitted to the motor at every moment; and the on/off switch of the electric motor.



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