1436
BALLISTIC PENDULUM
The ballistic pendulum allows to study the laws of conservation of energy and conservation of momentum in a perfectly inelastic collision.

This device is particularly sturdy, firmly fixed to its base and equipped by a state-of-the-art launcher made by using CNC technology.

The item is entirely manufactured in our factory, from the production of every component to assembly.

The launching system is removable and suitable to verify the initial speed of a projectile according to the laws of parabolic motion.

**Dimensions:**
Height: 30 cm
Base: 45x17 cm
A steel projectile having mass $m$ and speed $v$ is fired horizontally into the PVC pendulum swinging block which is initially stationary and whose mass $M$ is far greater than the projectile’s one. The speed of the projectile can be calculated thanks to the law of conservation of angular momentum, neglecting the effect of any external or frictional forces.

The launching system is removable and suitable to verify the initial speed of a projectile according to the laws of parabolic motion; this allows to compare the result with that one obtained by performing the inelastic collision experience.