

*This manual should be available for all users of these equipments. To get the best results and a higher duration of this equipment it is advisable to read carefully this manual and follow the processes of use.*

Thank you for choosing this equipment. We sincerely wish that you enjoy your equal arm balance. We highly recommend looking after this equipment according to what is stated in this manual.

develops its products according to the CE marking regulations as well as emphasizing the ergonomics and security for its user.

The correct using of the equipment and its good quality will permit you to enjoy this equipment for years.

The improper use of the equipment can cause accidents, damages, etc.

**TO GET THE BEST RESULTS AND A HIGHER DURATION OF THE EQUIPMENT IT IS ADVISABLE TO READ THOROUGHLY THIS MANUAL BEFORE OPERATING WITH THE EQUIPMENT.**

- ◆ As it is a precision instrument, you should carefully handle the balance avoiding sudden movements, knocks, free fall of heavy / sharp objects on it.
- ◆ Please make sure you keep the invoice, either for having the right to claim.
- ◆ Manufacturer reserves the right to modify or improve the manual or equipment.

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## 1. USES OF THE INSTRUMENT

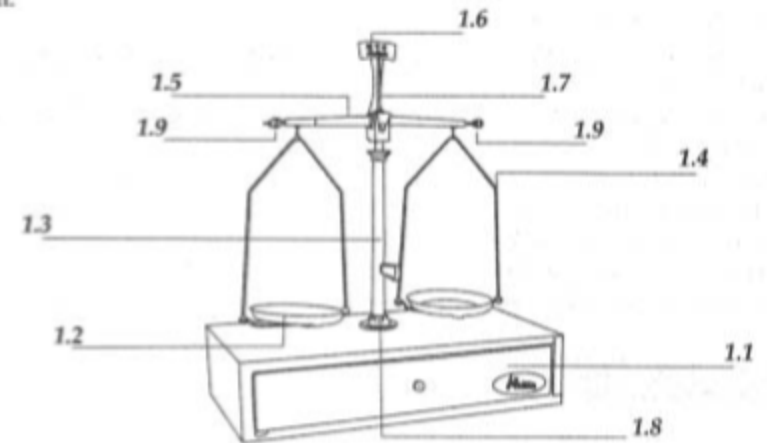
equal arm balances are very easy-to-use instruments, mainly aimed to educational purposes to show the weighing basic fundamentals.

Its functional design with wooden case allows storing the balance in a reduced place as well as keeping all the pieces inside the case to avoid their lost.

## 2. DESCRIPTION

- 1.1 Wooden case.
- 1.2 Pan.
- 1.3 Support.
- 1.4 Rod.
- 1.5 Arm.

- 1.6 Scale.
- 1.7 Needle.
- 1.8 Fixing lever.
- 1.9 Counterweights



## 3. TECHNICAL SPECIFICATIONS

With a capacity of 100 g and a readability of 0.02 g, the weighing system is made of steel and presents a locking system. Set of weights and fractions included.

<i>Capacity</i>	100 g
<i>Readability</i>	0.02 g
<i>Pan diameter</i>	80 mm
<i>Dimensiones</i>	30x16x8 cm

#### 4. INSTALLATION / SETTING UP

##### Preliminary inspection

Unwrap the balance and take off the involving plastic. Take off all protections and make sure that it does not present any damage because of the shipment. In case it presents any damage tell it immediately to your transport agent or dealer so that they can make the claims in the correct time limit.

Please keep the original wrapping; you will always need it for returns enclosed with all the accessories supplied.

Please check that all the accessories are enclosed with the equipment:

- Wooden case (contains the rest of the components of the balance).
- Support, arm, pans (2) and rods (2).
- Set of weights and fractions.

##### Installation

Before using this instrument, it is convenient for you to familiarize with its components and basic essentials.

**PLEASE READ THOROUGHLY THE INSTRUCTIONS BEFORE OPERATING WITH THIS EQUIPMENT.**

1. Please put the wooden base of balance on top of a horizontal, plane and stable table making a free space of at least 30 cm per side. Do not put the equipment near any warm supply (burners, blowlamps...), nor expose it directly to the sun, etc. Avoid vibrations in the working area.

2. Take out the rest of the components from the wooden case.

3. Put the support with the scale (Fig. 2) on the wooden base. For this, unscrew the holding screw (2.1) located at the base of the support and put the pin inside the hole of the wooden base (Fig. 3). At the bottom of the wooden base there is also a hole to introduce the hand to fix the holding screw easily.

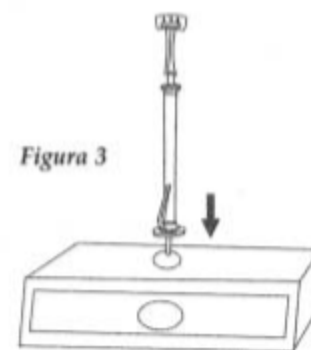
4. Put the arm (1.5) on the support (according to Fig. 1) so as the 100 g is at front. The extremes of the arm are marked with numbers 1 and 2. All the rest of the balance pieces are marked with numbers 1 or 2. Put the pan and the rod with number 1 printed on them in the arm end marked with 1, and the other pan and rod in the arm marked with number 2; to make the assembly easier put the fixing lever (1.8) at the upper position, so as, the rods and pans rest on the base preventing the weighing system from damages.

5. Once the balanced is assembled it must be levelled to work accurately. For this, the

Figura 2



Figura 3



needle (1.7) must coincide with the 0 of the scale. With the fixing lever (1.8) at the lower position check if the needle coincides or not with the 0 position; if it does not coincide put the fixing lever (1.8) at the upper position and level the balance by means of the counterweights (1.9) placed at the ends of the arm (moving the counterweight outwards weight is added to that side, and moving it inwards the weight is reduced). When the needle coincides exactly with the 0 position of the scale, the balance is levelled.

#### *Setting up*

- ◆ The balance must be always at resting position (fixing lever at the upper position) whenever adding or removing weights or samples from the pans; otherwise, the weighing system should be damaged.
- ◆ Weights and samples must be placed in the middle of the pan, and the weight must not exceed the maximum capacity of the balance.
- ◆ Once the sample and weights are placed, move the fixing lever to the weighing position (lower position) and check the position of the needle in the scale.

### 5. MAINTENANCE AND CLEANING

*To get the best results and a higher duration of this equipment it is essential to follow the processes of use.*

*NOTE: All the processes of use mentioned below will not have any value unless you keep a continued and careful maintenance.*

- ◆ Please follow the processes of use of this manual.
- ◆ This manual should be available for all users of this equipment.
- ◆ Preserve the balance from sudden movements, knocks, free fall of heavy / sharp objects on it, direct sun beams or air flows. Use the balance gently, as it is an accurate instrument. Protect It from dust.
- ◆ Don't through away the package.

#### *Cleaning*

- ◆ Never use scourers or substances that can grate for cleaning metallic parts as they damage the balance and produce an early ageing of the equipment.
- ◆ Use a fluff-free cloth dampened with soaped water that does not contain abrasives.



#### INSTRUCTIONS ON ENVIRONMENT PROTECTION

At the end of its life cycle, please, do not dispose of this instrument by throwing it in the usual garbage; hand it over a collection point for the recycling different instruments and equipments. It does not contain dangerous or toxic products for humans but a non adequate disposal would damage the environment. The materials are recyclable as mentioned in its marking. By recycling material or by other forms of re-utilization of old appliances, you are making an important contribution to protect our environment. Please inquire at the community administration for the authorized disposal location.