



## gako MedCaps

User Manual

## 1. Performance and Main Features

**gako MedCaps** is a glass cylinder with special graduation designed for the compounding process of hard capsules. It allows the appropriate choice of the capsule size to be used, as well as the exact definition of the amount of excipient required for the complete volumetric filling of the capsule, with total precision and in a practical and fast way.

## 2. Application

The use of **gako MedCaps** dispenses the use of calculations involving the bulk density of powders that normally vary among different batches of active ingredients and excipients. It determines the actual apparent volume of the formulation being compounded, avoiding weight variation between the multiple units of capsules. Both the choice of capsule size and the total amount of excipient required is decided easily, not depending on professional previous experience. It also allows the need to fractionate the prescribed dose into more than one capsule to be noticed.

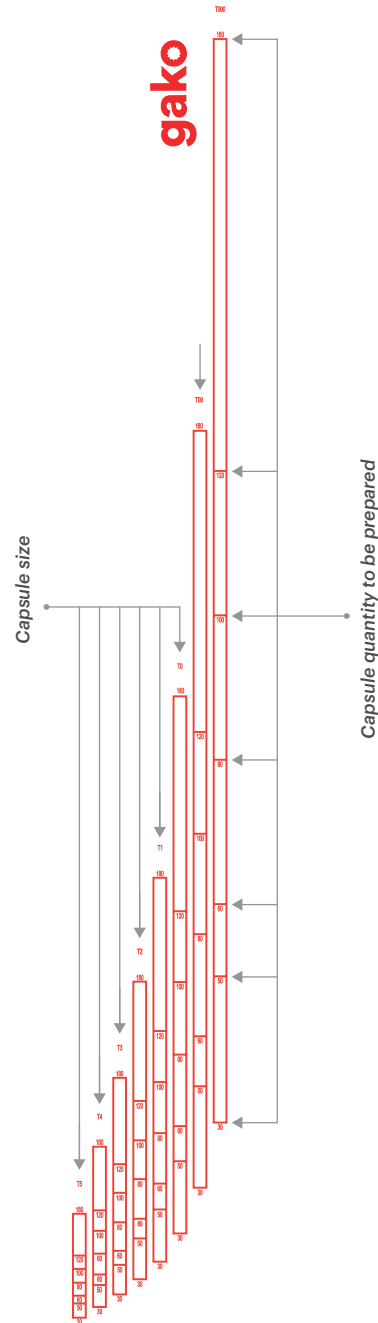
## 3. Technical Parameter

Model	gako MedCaps glass cylinder
Composition	Glass cylinder: Borosilicate glass (81% SiO <sub>2</sub> ; 13% B <sub>2</sub> O <sub>3</sub> ; 4% Na <sub>2</sub> O + K <sub>2</sub> O; 2% Al <sub>2</sub> O <sub>3</sub> ) // Tamper: Nylacast Polyacetal (POM-C); Stainless Steel 316TI.
Graduation	Permanent red engraving
Diameter (external)	32 ± 2mm
Height (external)	400 ± 5mm
Diameter (internal)	29 ± 2mm
Height (internal)	375 ± 2mm

## 4. Functions and Use

### 4.1 Graduation

Graduation present in **gako MedCaps** is suitable for all capsule sizes used in human and veterinary medicine (from # 5 to # 000 capsules sizes), in accordance to most prescribed quantities (30, 50, 60, 80, 100, 120 and 180 capsules). The device allows to determine the real volume of the formulation, matching the capsule size according to the desired quantity, preventing weight variation among capsules (see **Figure 1**).



**Figure 1.** Graduation scale of **gako MedCaps**.

## 4.2 Operation

- Before using the **gako MedCaps**, make sure the equipment is clean and dry;
- Weight the active ingredients of the formulation according to the prescription;
- Transfer the active ingredients into the **gako MedCaps**;
- With the **gako MedCaps Tamper**, slightly compact the powder, simulating the tamping process during encapsulation;
- Choose the correct capsule size according to the occupied volume of the quantity needed (choose the closest size up);
- Add the necessary excipient amount directly on the **gako MedCaps**, until completion of desired volume;
- Slightly compact the powder with the **gako MedCaps Tamper** again;
- Complete the volume again if needed;
- If a higher quantity of excipient is needed (for active ingredient stability or bioavailability), the subsequent size capsule should be chosen;
- If there is need of fractionated servings, choose the capsule size and number of capsules that better suits all ingredients of the formulation.

## 5. Attention

- Please read the user manual carefully before using the equipment;
- The use must be carried out in accordance with the rules stipulated in the manual;
- The equipment is made of glass, careful handling should be in place to avoid damage.

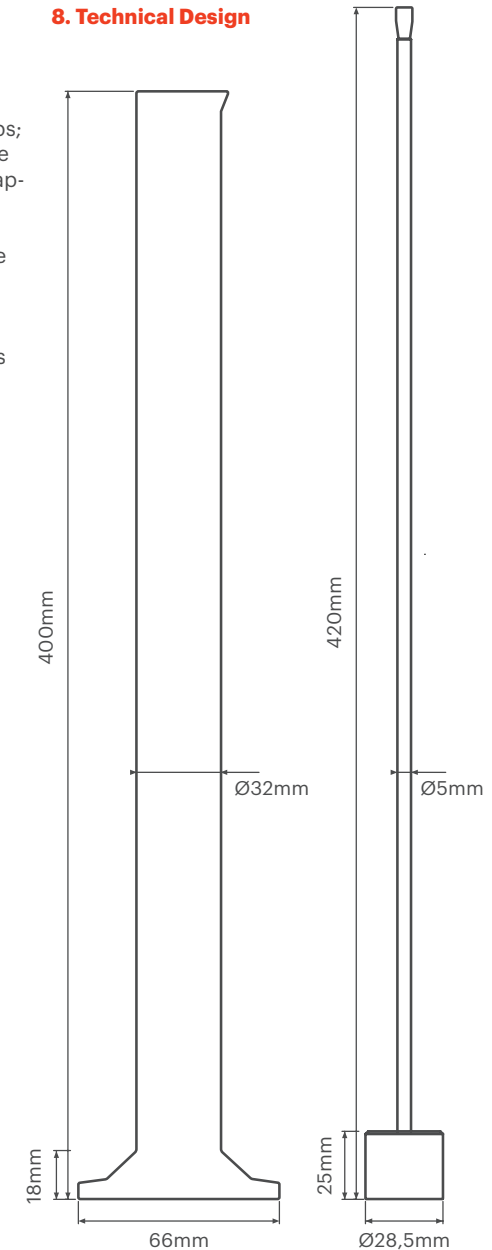
## 6. Maintenance

- The cylinder is made from borosilicate glass, it does not need further calibration;
- Clean the equipment only with non-abrasive agents (neutral soap and water);
- Use the tube brush (included) for cleaning the cylinder;
- Do not scrub the external surface of the cylinder to avoid damage on the engravings;
- Dry the device naturally or in drying cabinet;
- Do not use abrasive products.

## 7. Transportation and Storage

While transporting the equipment mechanical collisions should be avoided. The equipment should be stored in a dry place.

## 8. Technical Design



**Figure 2.** Technical design

