

## AS-100 Tap density tester



### Principle

Definition of tapped density is an increased bulk density attained after mechanically tapping a container containing the powder sample. Tapped density is obtained by mechanically tapping a graduated measuring cylinder or vessel containing a powder sample. After observing the initial powder volume or weight, the apparatus measuring cylinder or vessel is mechanically tapped, and volume or weight readings are taken until little further volume or weight change is observed. The mechanical tapping is achieved by raising the cylinder or vessel and allowing it to drop under its own weight a specified distance by either of three methods as during tapping may be preferred to minimize any possible separation of the mass during tapping down. This parameter is very important in packing the material. During tapping of the sample, the smaller particles try to fit themselves in gaps of the larger particles and hence the total volume of the powder reduces.

### Specifications

**Test Report Output:** Integrated Micro Printer

**Operation:** LED and membrane panel

**Speed(Variable):** USP Method I  $300 \pm 1$  tap/min USP Method II and ASTM  $250 \pm 1$  tap/min

**Drop Height(Variable) :** USP Method I  $14 \pm 2$  mm; USP Method II and ASTM 3

± 0.3 mm

**Platform rotation:** USP Method I 5-15 rotations/min; USP Method II and ASTM N/A

**Accuracy:** < 1 tap of 10000 taps

**Input power:** AC 220V 50Hz/110V 60Hz (optional)

**Dimensions:** 35.8 cm W x 51.6 cm H\* x 29.7 cm D (\* height with 100mL cylinder)

**Weight:** 13.8 kg net; 20 kg gross

**Recommended size of accoustic cabinet:** 60 cm W x 80 cm H x 40 cm D (Internal size)

## Features

### -Flexible parameter adjustment

The AS-100 Tap Density Tester changes easily the key parameter such as tapping speed and drop height in order to meet various international standards.

### -Fast and easy operation

The LED and mebrane control pannel brings operator a easy and fast operation. Accurate to 4 decimals. Automatically saving all the test information.

### -Reduced noise

AS-100 is available with an optional accoustic cabinet in order to reduce the noise level, while operator can monitor the operation through the front transparent plexiglass door. AimSizer gives optimum internal size in order to reduce the shipping cost as well.

### -Easily outputing hard copy

The integrated micro computer prints the test data including Sample No, Weight, Volume, Tap Number, Tap Density and Operator by simply pressing the button on membrane.

### -Easy to clean

The outter surface is plastic coated, it is strong and resistant to any powders non-corrosive or corrosive. It makes for the cleaning procedure as well as a longer working life.

## Applications

Density measurement of Pharmaceuticals, Minerals, Pigment, Metal Powders,

Catalysts, Coffee, Tea, Compounds and other powders suitable to be tested according to above mentioned international standards