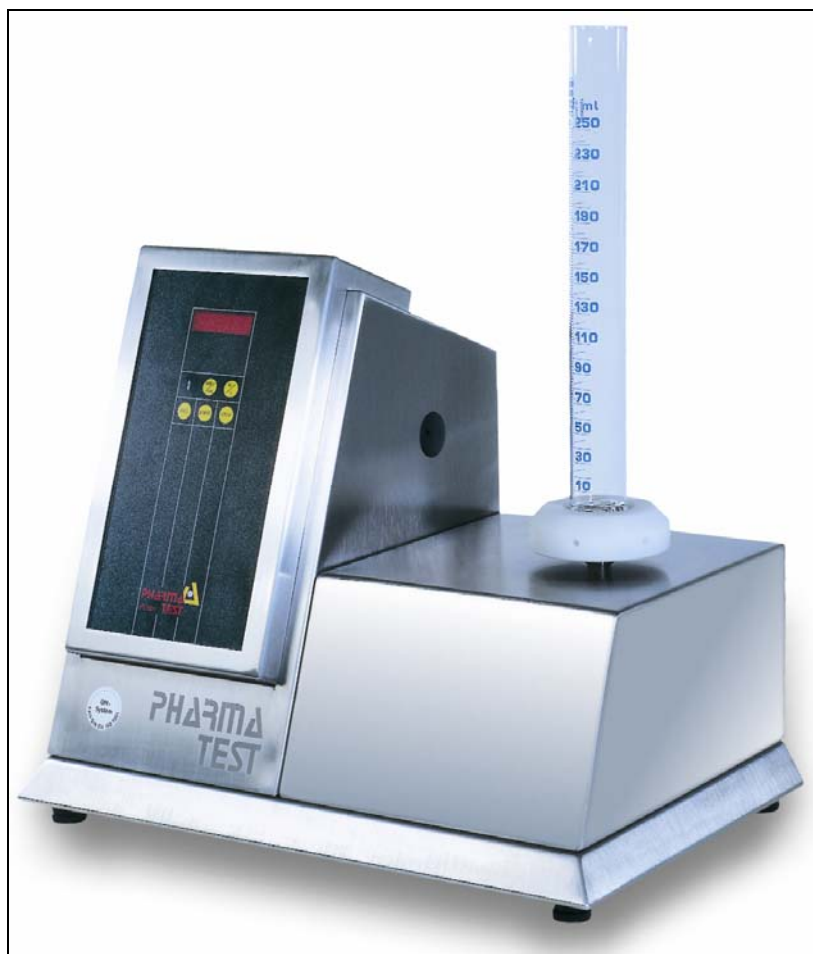


Tapped or Bulk Density or Apparent Volume Test Instrument - Type PT-TD1



The **PT-TD1** testing instrument is designed for tapping or bulk density or apparent volume testing of powders and granules in compliance with USP <616> App. 2, EP <2.9.15> and DIN 53194. The instrument is used to determine additional physical product characteristics with others like particle size, size distribution and shape. Together with information describing the behavioural characteristics such as flow properties, density etc. the results are used to improve the design quality during development as well as the conformity of product in quality assurance and in-process control.

A graduated 250 ml glass cylinder takes the sample to be tested. Driven by a silent DC motor the stroke mechanism performs 250 strokes per minute of a fixed 3 mm height. The total number of strokes or operating time is entered using the keyboard of the apparatus. A digital display shows the elapsed time or number of strokes to the operator who can always recall the nominal information entered previous to the test start.

Usually the sample is 10, 500 and 1250 times tapped, thereafter the volume of the tapped sample is controlled and another 1250 tapping follow, this procedure is repeated until the difference of the consequent test becomes less than 2%. This result is used to calculate apparent volume and apparent density or the compressibility index. Tap volume is expressed in cm^3/g and calculated as volume divided by weight, tap density is expressed in g/cm^3 and calculated as weight divided by volume.

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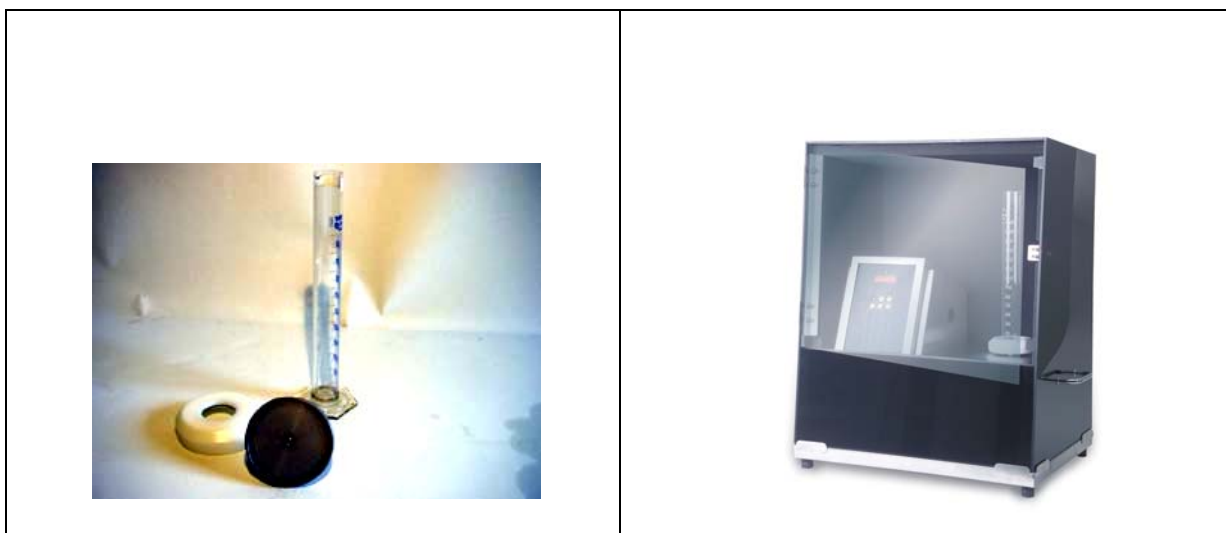
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Options

- 100 ml cylinder and support for less product tests, easy exchangeable with the standard 250 ml set-up (order no. 490-0200)
- Noise Protection Hood



To test for Apparent Volume/Density, or to obtain the Tap Density value for powders and granulates, the sample has to be tapped in a measuring cylinder in order to compact it to a "minimum" volume. The device, by the nature of the test, is relatively loud when in operation. In order to reduce the environmental impact of the noise produced we have introduced a special noise reduction enclosure which reduces the overall sound level by approximately 10dBA. The whole PT-TD1 fits into the enclosure and is accessed for cleaning and/or sample change through a hinged front door (order no. 49-02100)

Technical Data

| | |
|---------------------------|-------------------------------|
| Display: | LED Display |
| Keyboard: | Numerical and function keys |
| Tapping frequency: | 250 ± 15 strokes/minute |
| Tapping height: | 3.0 ± 0.2 mm |
| Number of strokes: | Selectable from 10 - 9999 |
| Number of test stations: | 1 (to avoid any interference) |
| Noise Level in operation: | Approx. 74 dB (without hood) |

Weights and Dimensions

| | |
|---------------|-------------------------|
| Net weight: | approx. 11 kg |
| Gross weight: | approx. 20 kg |
| Packaging: | approx. 60 x 60 x 40 cm |

We reserve the right to make technical changes without any prior notice

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