

# TAP DENSITY TEST APPARATUS

## MODEL: VTAP/MATIC-II



### APPLICATIONS:

- Pharmaceutical and Bulk Drug Industry
- Food Industry
- Packaging Industry
- Granules and Flakes Manufacturing Industry

### FEATURES:

- Microcontroller Based Instrument
- Supports both USP - I & USP - II methods
- ASTM Method Optional
- Easy-to-Read Alphanumeric Backlit LCD Display
- Stepper Motor Drive
- Built in Validation Facility
- Feather Touch Key Board
- Serial Port Printer Interface
- On line messages for user friendly operations.
- On line information of the Test Status.
- Alphanumeric Data Entry for various Test Parameters.
- Auto Tap Repeat facility till the test is completed.
- Calculates Bulk Density, Tapped Density, Compressibility Index and Hausner Ratio
- Error Messages to avoid incorrect data entry.
- Printout as per GLP requirements.
- Test method storage facility up to 24 test methods.
- Password protected data.
- Simultaneous Rotating and Tapping of the Cylinders

## TAP DENSITY TEST APPARATUS MODEL VTAP/MATIC - II

Tap density of the sample is achieved by mechanically tapping a measuring cylinder containing a powder sample. The mechanical tapping is achieved by raising the cylinder and allowing it to drop under its own weight from a specific height and at specific interval. The cylinder is rotated during tapping to minimize any possible separation of the sample during tapping. After observing the initial volume, the cylinder is mechanically tapped, and volume readings are taken until little further change in volume is observed.

The instrument works automatically and calculates the Tapped Density and other relevant parameters. The instrument is having facility to store 24 test methods in its memory in a file format. These files can be programmed as per the individual monogram. The data in the files is Password protected to avoid editing by an unauthorized person.



### SPECIFICATIONS:

- Test Methods: USP I and USP II, ASTM Optional
- USP Specifications:
  - Method USP - I:
    - TAP HEIGHT: 14 mm +/- 2 mm
    - TAPPING RATE: 300 taps/min approx.
  - Method USP - II:
    - TAP HEIGHT: 3 mm +/- 10 % (+/-0.3 mm)
    - TAPPING RATE: 250 taps/min approx.
- Validation: Built in Validation Facility
- Tap Range: 1-9999 Taps
- Cylinder Rotation: Simultaneous Rotating and Tapping of the Cylinders
- Drive: Stepper Motor Drive
- Display: 20 x 4 Lines Alphanumeric backlit LCD
- Key Board: 16 Keys Feather Touch Key Board
- Printer : Serial printer port for 80 Column dot matrix EPSON printer
- Power Supply: 220/230 V AC, 50/60 Hz, 2 Amp Max
- Dimensions (mm): 360 L x 260 W x 360 H (Approx.) without cylinders
- Weight: Nett – 17 kg  
Gross – 25 kg (Approx.)

## TAP DENSITY TEST APPARATUS

### MODEL: VTAP/MATIC-II (AC)

This model is same as model VTAP/MATIC -II, additionally equipped with acoustic cabinet for sound insulation.