BETTER FUNCTIONALITY | BETTER PRECISION | BETTER ANALYSIS



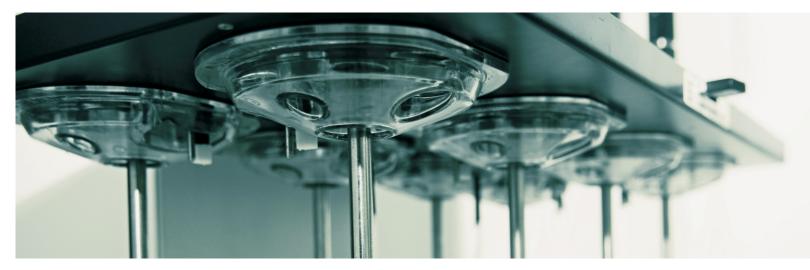
Tablet Dissolution Test Apparatus
DS 8000 (Basic)



### **DISSOLUTION TEST APPARATUS**

Dissolution Tests are conducted to determine the drug release patterns, physiological availability and bioavailability of formulated drug products. It is also used as a quality control tool. The Dissolution rate of a drug from the solid state is defined as the amount of drug substance that goes into solution per unit time under standardised conditions of liquid / solid interface, temperature, and solvent composition.

LABINDIA brings to you the State-of-the-art Dissolution Testing Apparatus in elegant design with advanced features, which supports USP 1, 2, 5 & 6. Apparatus for Intrinsic test & stationary basket methods are available.



## STANDARD FEATURES

- Advanced, Micro-Controller based: User-friendly, complies with current USP, IP & EP specifications.
- Splash waterproof keyboard: Alphanumeric polyester soft keys for keyboard.
- Moulded water bath with 6+2 (3+1 & 3+1) vessel configuration enables comparative studies.
- External vibration free Water Circulator: for uniform water circulation, with audible, low water level alarm, with indication on display for safety.
- Mono shaft design with automatic adjustment for 25 mm depth setting with easy changeover between Apparatus I & II eliminates routine height validation as per USP.
- Paddles, Baskets and Vessels are laser marked with serial numbers for traceability.
- Tablet dispenser drops 6 dosage form at single instance. (Optional)
- Low Evaporation Lids:
  - » The conical shape low evaporation recovery lids reduces media loss during long run.
  - » Integrated pre-centered lids; no manual removal or positioning of lids. This ensures automatic vessel centering and precise positioning of paddle/basket with shaft without any special tool as per pharmacopeia requirements.
- State-of-the-art design:
- » Easy placement and locking of vessels, the Ease-align system allows the vessels to simply slide into the place (Bionet Locking). Once placed, vessels do not float even when empty.
- » Facility to monitor Vessel temp., with DTS Technology (Digital Temperature Sensor)

## **SOFTWARE**

- GLP Compliance:
- » Alphanumeric entries of Sample Name, Sample Number and Identification Number for authentication.
- » Built-in Real Time Clock (RTC) for date and time on display and on printout.
- » Daily Auto Incremented Run Number and factory entered CUSTOMER NAME with Instrument Serial Number on report printouts make the system foolproof.
- » Non-Volatile memory storage of 15 methods with parameters.
- Protects Editing, Avoids invalid entries:
- $\ensuremath{^{\mathsf{y}}}$  Two tier password protection Admin and User
- · Ease in operation:
- » Dissolution RUN can be started with last run parameters.
- » Facility to view Set Parameters during RUN.
- » Auto Start facility to continue the dissolution analysis in case of short power interruption (especially useful for long duration analysis of sustained release tablets).
- » Reports can be obtained even after Resetting / Power off / Power failure conditions.
- » Error indication helps user to trace the problem.
- Alarms and Indications: Audible indication for ready state of instrument.
- Wake-up Alarm: This unique feature automatically turns the bath heater ON at a predetermined time.



# REGULATORY COMPLIANCE

- DS 8000 meets all requirements relating to validation, qualification and calibration.
- $\bullet$  Appropriate qualification documents (I.Q. / 0.Q.) can be supplied with the instrument.

# ADDITIONAL FEATURES (OPTIONAL)

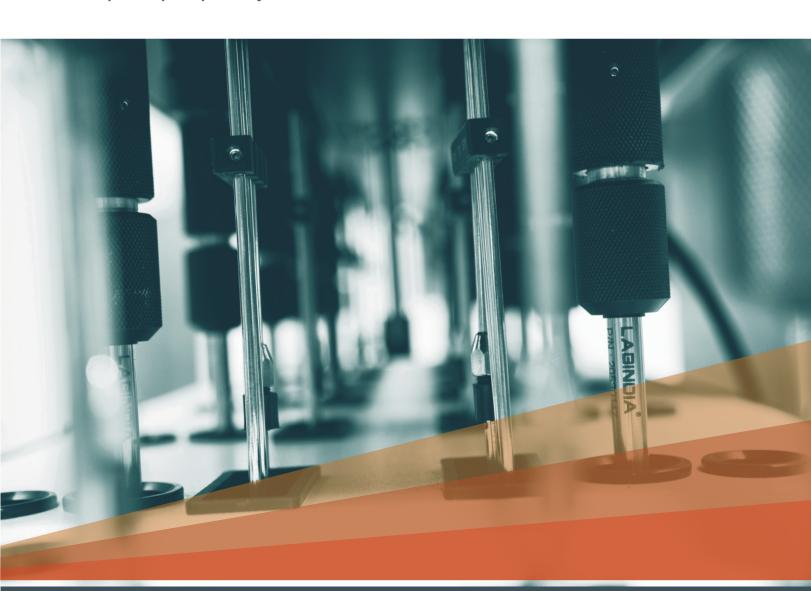
- 6 Vessels Temperature Monitoring System automatically measures and records the temperature of individual vessel at specified sample time points.
- Validation Software for RPM & Temperature.
- Recovery Test facility to study 100% Drug Dissolution.

## **REPORTS**

Selectable Report Format, complying with GLP requirements.

### **RUN REPORT**

- a)Report giving Run No., Set parameters and Actual parameters during the dissolution process.
- b)Diagnostic functionality report to ensure proper working of the system
- c)Printout of each vessel temperature and paddle/basket speed at every sampling time point for validation.
- d) Validation report for Temperature & RPM



- Control: Micro controller based (Advanced version of microprocessor).
- Display: 40 x 2 line back lighted liquid crystal display (LCD)
- **Keyboard**: Alphanumeric splash waterproof polyester soft keys.
- Method Storage: 15 programs with parameters.
- Data Storage: Available with Non-Volatile memory.
- Water Bath: 17 litres capacity with built-in water level sensor / Front located drain tap for easy draining of the water bath.
- Bath Circulation: External vibration free water circulator
- Temperature Range: 20°C to 55°C • Temperature Resolution: 0.1°C
- Temperature Control Accuracy: up to  $45^{\circ}\text{C} \pm 0.1^{\circ}\text{C} \& >45^{\circ}\text{C}$  up to  $55^{\circ}\text{C} \pm 0.2^{\circ}\text{C}$
- Temperature Sensor: DTS Digital Temperature Sensor
- Paddle/Basket Shaft Speed: Range 20 to 250 RPM ±1%
- Dissolution Vessel: option for Polycarbonate / Glass Vessels (clear, amber, peak vessels, 250, 150 & 100 ml dissolution vessels available)
- Sampling Time Selectivity: Fixed/Programmable (varying intervals)
- Time Interval Selectivity: In steps of 1 minute
- Maximum Number of Intervals: 30
- Dissolution Process Time: 1 min. to 720 hours
- 6 Channel Temperature Reader: Optional with Temperature Reader

Report Format: a) GLP & Pharmacopeia compliant b) Program parameter report

Output: a) Printer: Compatible for deskjet, inject and dot matrix printer with parallel por t b) RS232C: For PC Connectivity

c) 21 CFR Part 11 compliance software available (optional)

- Power: 110 / 220 V AC 50 Hz / 60 Hz
- Environmental Operating Conditions: a) Operation: Indoor. b) Temperature: Ambient to 45°C. c) Humidity: 5 to 90% non-condensing.
- Dimensions: 71.5 x 60 x 70.5 cms. (W x D x H)
- Weight: 80 kgs. approx.



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