

1. Tender Specification for Dissolution Test Apparatus with Intrinsic Dissolution Assembly

We wish to procure Dissolution Test Apparatus with Intrinsic Dissolution Assembly having minimum following specifications:

❖ **Basic Dissolution Bath Specifications.**

- **System should have 6+2 Vessels** configuration which enables comparative studies.
- **System should have Monoshaft design** for easy change over between Apparatus 1 & 2, eliminates the routine height validation.
- **The system should have PVDF bath top plate for chemical resistance.**
- **The Top Plate should have the serial number.**
- **System should have** Special chuck Housing for Minimum Wobble.
- **kSystem should have Serialized Housing, paddle, basket along with shaft for authentication and validation.**
- **System should have RS-232 interface for Data down loading.**
- **System should have** Built-in immersion pumps with heater to eliminate vibration.
- **System should have** Front Drain Tap for easy Bath cleaning.
- **System should have Easy locking facility for Tablet Dispenser for tablet drop and for easy Manual Sampling with conical shape low evaporation lids to minimize the losses on evaporation.**
- The polycarbonate vessels should have the molded collar for centering and for easy interchangeability between Glass to polycarbonate without changing the bath top plate.
- The system should have the GLP Compliance.
- The System is microprocessor control with **40x2line back light (LCD) Display.**
- Method Storage: **15 Programs**
- Water Bath: **17 Liter capacity with built in water level sensors**
- Temperature Range: **30 deg to 40 deg.**
- Temperature Resolution: **0.1 °C**
- Temperature Control: **±0.1°C**
- Paddle/Basket Shaft Speed : **20 to 250 RMP ±1%**
- Maximum No of Intervals: **30**

❖ **Intrinsic Dissolution Assembly with below requirement:-**

- Surface plate pack of 6
 - Die for intrinsic pack of 6
 - Die holder for intrinsic pack of 6
 - Punch for intrinsic pack of 6
 - Shaft for die holder (intrinsic) pack of 6
 - Depth gauge for intrinsic holder (base & top) pack of 1
 - Plain washer ss m6 x 12.5 x 1.6mm thk pack of 18
 - Nylon screw m6 x 12mm (intrinsic) pack of 18
 - Allen key 5mm pack of 1
 - Screw driver taparia pack of 1
 - Allen cap screw m6 x 15mm ss pack of 18
 - M6 ss spring washer pack of 18
 - Silicon gasket (intrinsic) pack of 6
- ❖ System Should be Quoted along with **TABLET Dispensing Attachment** for simultaneous dropping of dosage form with low evaporation lids
- ❖ System Should be Quoted With Hydraulic Pellet Press as Part of main System.

2. Technical specification of Digital Melting Point Apparatus

Technical Features:

- Simple instructions and messages on 240 x 64 graphic display.
- User friendly key board.
- PS-2 Computer key board for quick & easy data entry.
- Facility to select Melting Point or Boiling Point test type.
- Memory provision for storage of 99 Product names with their expected Melting Point.
- Memory provision for storage of 25 Product names with their expected Boiling Point.
- Provision for Unknown/New product evaluation.
- Validation Program for Standard samples.
- 8 Operator names can be stored.
- Different levels of Password protection.
- Memory to store around 100 test records.
- On line and off line printing facility with date and product selection.
- Selection of Stirrer speed through keyboard.
- Facility to customize test reports with user Company's name and Instrument number.
- Equipped with color camera and color monitor to observe Melting Point with ease.
- Facility for testing UNKNOWN sample.

Technical Specifications:

- Temperature range: Room temperature +15 °C - 300 °C.
- Accuracy: 0.3 – 0.5 °C.
- Temperature resolution: 0.1 °C.
- Heating rate: 1 °C/minute (Starts from set temperature – 10 °C).
- No of capillary tubes: 1 for Melting Point/ 1 for Boiling Point.
- Display: 240 x 64 Graphic LCD.

- Input: 4 x 4 Tactile Keyboard + PS - 2 Keyboard.

3. Technical Specifications of pH Meter

Technical Features

- Large Backlit graphic display.
- Informative display shows Electrode Status, time, date, sample ID, User ID and Calibration Points
- 5 Point pH Calibration with automatic recognition of buffers (for US/NIST and DIN)
- Calibration edit facility to fix calibration errors without full recalibration
- Non volatile memory holds up to 2000 data points with time and date stamp.
- Transfer of data with USB and RS232 ports and complimentary data analysis software
- Power as well as battery operated

Technical Specifications:

pH

Range : -2.00 to 20.000

Resolution : 0.1, 0.01, 0.001

Relative Accuracy : ±0.002

pH Calibration Points : Up to 5

Calibration Editing : Yes

mV

Range-mV : ± 2000.0 mV

Resolution : 0.1

Relative Accuracy : ±0.2 mV or ±0.05% of reading whichever is greater

EH ORP Mode : Yes

Temperature

Range : -5 to 105°C, 23 to 221°F

Resolution : 0.1

Relative Accuracy : ±0.1

offset Calibration : 1 Point

Datalogging

Number of points : 2000 with time and date stamp

Log Function : Manual, ready (includes AUTO- READTM), timed

Log Edit : Delete individual points, group of points or all

Inputs

pH Electrode : BNC, reference pin

ATC Probe : 8-pin mini-DIN

Output : RS232, USB

Power

AC Adapter : Included-universal, 100-240 VAC

Battery Power : Optional- 4 AAs

Battery Life : 800 hrs

Instrument to be supplied with ROSS Triod 3-in-1 pH/ ATC electrode, NIST pH buffers 4.01, 7.00, 10.01 , pH cleaning solution and pH electrode storage

4. Technical Specifications of Flat Surface Electrode

ROSS Ultra® combination pH electrode with epoxy body, flat surface

Technical Specifications:

pH range : 0-14

pH Precision : 0.01

Temp. Range : 0-100°C

Internal Ref. : ROSS

Junction : Glass fiber

Dimension : L – 120mm
D – 12mm