



**Kerala State Homoeopathic Co-Operative Pharmacy Ltd.**

(sponsored by government of Kerala & aided by govt. of India)  
Office: Pathirappally, Alappuzha, Kerala, India. Pin-688 521

Phone : 0477 2258012  
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Website : [www.homcokerala.com](http://www.homcokerala.com) Email : [homcokerala@gmail.com](mailto:homcokerala@gmail.com)

**Supplier's Copy**

**USER REQUIREMENT SPECIFICATION**

|                               |   |   |
|-------------------------------|---|---|
| <b>Name of the Company</b>    | : |   |
| <b>Contact Person</b>         | : |   |
| <b>Address</b>                | : |   |
| <b>Contact Details</b>        | : |   |
| <b>Department</b>             | : | <b>QCL- First Floor and Production IPQC area<br/>tablet section – second floor.</b>   |
| <b>Equipment and Code No.</b> | : | <b>Tablet Friability Test Apparatus</b>   |
| <b>Name of work</b>           | : | <b>Supply, Installation, Commissioning &amp; Qualification of cGLP model Tablet Friability Test Apparatus at M/s. HOMCO –Kerala</b> |
| <b>Ref. No.</b>               | : |   |
| <b>Date</b>                   | : |   |
| <b>Enclosures</b>             | : |   |
| <b>Quantity</b>               | : | <b>QCL – 1 No.<br/>IPQC - 1 No.</b>   |

APPROVED BY REJI ABRAHAM

DATE : 22/12/2025



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### TABLET FRIABILITY TEST APPARATUS

#### **ANNEXURE - I : BASIC DETAILS OF THE MACHINE**

| <b>DESCRIPTION</b>                                  |   |   |
|---|---|---|
| (To be specified by the supplier, if any variation) |   |   |
| Scope   | : | Supply, Installation, Commissioning & Qualification of cGLP model Tablet Friability Test Apparatus along with connecting accessories, cables etc. at M/s. HOMCO -Kerala |
| Model   | : | *<br>*  |
| Type  | : | Front loading*  |
| Number of Drums                                     | : | 2 nos.*   |
| Fixed RPM   | : | 20 to 60 RPM*   |
| Accuracy  | : | $\pm$ 1 RPM *   |
| Timer   | : | Settable up to 11 hrs. 59 min. 59 sec. *  |
| Counter (Rotation)                                  | : | 1 to 9999 rotations *   |
| Display   | : | 2-line LCD Display/High Resolution Touch Screen*  |
| Input   | : | 4 x 4 Tactile keyboard / High Resolution Touch Screen *   |

**\* To be specified and confirm by the supplier as per their equipment design**



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### ANNEXURE - II & III : CGMP AND OPERATIONAL FEATURES

#### DESCRIPTION

(To be specified by the supplier, if any variation)

|     |   |   |
|-----|---|---|
| MOC | : | * |
|-----|---|---|

The machine should consist of:

- Unit should have front loading system. \*
- Unit should have Interlocking mechanism so as to ensure correct drum position. \*
- Unit should be incorporated with micro-controller circuitry and to be user friendly. \*
- Keyboard should be alphanumeric splash proof for entries like sample name, batch number for data authentication. \*
- Should be Programmable Modes: Timer or Rotation. \*
- Tablets should load easily. \*
- Drums should have a slot positioned to automatically discharge the tablets into the trays at the end of the test without dismantling the drum assembly. \*
- Error message should trace out the problem. \*
- Instrument should tilt to 10 degree angle. \*
- Should support regular friability drum and abrasion drum. \*
- Calculated friability percentage should be indicated on the display as well as print. \*
- Balance interface for sample weight should transfer. \*
- Instrument should comply with USP, BP and IP specifications. \*
- Should have 3 level password protection, one admin and at least 10 user id creation for unique operation is required. \*
- Port should be provided for test report. \*
- PC connectivity option for generation of report with external software in future. \*

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### ANNEXURE - IV : ELECTRICAL DETAILS

#### DESCRIPTION

(To be specified by the supplier, if any variation)

|                                     |   |   |
|-------------------------------------|---|---|
| Standard Operating Frequency        | : | 50 Hz   |
| Standard Operating Voltage          | : | 230 / 415V*   |
| Total power consumption             | : | *   |
| Motor Details with rpm              | : | *   |
| Gear Box Details (If any)           | : | *   |
| PLC and HMI details                 | : | *   |
| VFD details (If any)                | : | *   |
| Tower lamp                          | : | *   |
| Starter                             | : | *   |
| <b>Major Cabling details</b>        |   |   |
| For Main supply (In client's scope) | : |   |
| For Main drive motor                | : | *   |
| End connection details              | : | MCB or Socket should be with equipment  |
| Earthing requirement                | : | Arrangement should be with system   |
| An Isolator Circuit breaker         | : | To be supplied with machine at power supply in point of appropriate capacity by vendor. * |
| Cable length with equipment         | : | *   |

*Any other detail not mentioned above, also to be included.*

*Client will provide & connect the required cable in to vendor's panel. From machine panel to machine and its other accessories to be supplied and connected by vendor at site.*

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### DESCRIPTION

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#### Miscellaneous:

- ❖ Wiring between Panel and the Machine should be in the Scope of Vendor. The exact measurements shall be taken by visiting the site. \*
- ❖ The Incomer to the Operating Panel shall be provided by HOMCO, however any Cable Trays or SS 304 Conduits required for the same shall be provided by the Vendor. \*
- ❖ Cable routing from Operating Panel to the Machine shall be done as per cGMP i.e., routing through Cable Trays outside Clean Room Areas and SS 304 Conduits inside Clean Room Areas. \*
- ❖ All the Component Makes should match the Approved Makes list provided. \*
- ❖ Any deviation from this should be documented and communicated to HOMCO. \*
- ❖ All Calibration Certificates are to be produced during Installation of Machine, without which the Installation is deemed incomplete. All the Certificates should be Traceable to National / International Standards. \*
- ❖ The Validity of Calibration shall be minimum 9 months and maximum 12 months from the date of Installation. \*
- ❖ All the Signal Cables should be shielded to avoid interference. \*
- ❖ Complete Earthing of Equipment. \*
- ❖ Complete covering of Electrical Cables and Other Connections. \*

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### ANNEXURE - V : SAFETY FEATURES

#### DESCRIPTION

(To be specified by the supplier, if any variation)

The equipment should be provided with motor overload safety relay. \*

In the event of equipment malfunction or stoppage of utilities, the unit must contain all necessary protection devices to ensure that equipment and product remain in safe condition. \*

Equipment settings should not get disturbed due to power failure. \*

Equipment should not restart without human intervention. \*

Equipment should indicate fault through audio / visual signal with details on Control panel (Failure mode detection) \*

An easily accessible emergency stops to be provided on main control panel door. \*

Lubricant should not come in product contact. \*

Wherever possible, warning symbols should be provided. \*

Electrical wiring must be concealed \*

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### ANNEXURE - VI : UTILITY REQUIREMENT

#### DESCRIPTION

(To be specified by the supplier, if any variation)

|                   |   |                  |
|-------------------|---|------------------|
| Vacuum            | : | *                |
| Compressed Air    | : | Ordinary *       |
|                   |   | Non-Lubricated * |
| Any other utility | : | *                |

**\* To be specified and confirm by the supplier as per their equipment's design requirement with pressure and flow rate along with any valve, pipe, nozzles size required and scope of supply.**



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### ANNEXURE - VII : CLEANING TECHNIQUE

#### DESCRIPTION

(To be specified by the supplier, if any variation)

|  |   |   |
|--|---|---|
| Mode of machine cleaning   | : | * |
| Use of Lubricants  | : | * |
| All contact parts should be easily dismantled and cleanable. *   |   |   |
| Easy washing and cleaning facility should be available. *  |   |   |
| Drain points: Vendor should specify the pipe size and location of drain points <b><u>if required</u></b> as per their system's drain requirement with pipe, nozzle size, valve etc.* |   |   |

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### ANNEXURE - VIII

### MECHANICAL DETAILS

#### DESCRIPTION

(To be specified by the supplier, if any variation)

|                                  |   |   |
|----------------------------------|---|---|
| Dimension (In mm)                | : | * |
| Net Weight (In Kgs.)             | : | * |
| Type of Packing                  | : | * |
| Case Dimension (In mm)           | : | * |
| Gross Weight (In Kgs.)           | : | * |
| Foundation details (If required) | : | * |

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### ANNEXURE - IX : LIST OF ANCILLARY / ACCESSORIES / OPTIONAL ITEMS

#### DESCRIPTION

(To be specified by the supplier, if any variation)

- Optional Items (If any, Vendor should provide the list with rate) \*
- Recommended Spares along with list & quantity (Vendors should submit with tender) \*
- If any items required but not included in URS, to be mentioned and submitted with unit rate and quantity \* (And it can be indicated during pre-bid meeting)

#### **Optional: To be quoted by the bidder with specification**

- TDS & Salinity Mode\*

Any other ancillary or accessories or optional items not mentioned above also to be quoted.

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### ANNEXURE - X : TRAINING REQUIREMENT

- Training to all concern of M/s. HOMCO, Kerala for the Installation, commissioning, and Qualification of this lab item should be provided by vendor and training record will be documented.
- shall support client in execution of all the Qualification Phases.



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### ANNEXURE - XI : APPROVED MAKES

|  |   |   |
|--|---|---|
| Approved Manufacturers of Disintegration tester  | : | <b>Lab India, Veego, Electrolab, Pharmag instruments.</b> |
| Stainless Steel Sheet & Pipe: Tata / Jindal  | : | *   |
| PLC: Siemens / Allen Bradely / Delta   | : | *   |
| HMI: Siemens / Allen Bradely / Delta / Exor  | : | *   |
| Cables: Finolex / Polycab  | : | *   |
| <p>❖ <b><i>Any other components, not mentioned above, to be specified by the vendor.</i></b></p> <p>❖ <b><i>All the Component Makes should match with the Approved Makes listed above. Any deviation from this should be documented and communicated to HOMCO and Pharma Consultant.</i></b></p> |   |   |

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### ANNEXURE - XII : DOCUMENTATION

List of all Documents to be supplied along with equipment [AS APPLICABLE]

| Sr. No. | Document to be supplied  | Qty    | Remarks |
|---------|--|--------|---------|
| 1       | SAT/FAT procedures   | 2 sets |         |
| 2       | Operation manual   | 2 sets |         |
| 3       | Maintenance manual   | 2 sets |         |
| 4       | Spare parts manual   | 2 sets |         |
| 5       | All engineering drawings   | 2 sets |         |
| 6       | List of instruments  | 2 sets |         |
| 7       | Calibration certificates   | 2 sets |         |
| 8       | Warranty / Guarantee   | 2 sets |         |
| 9       | List of all components with referencing  | 2 sets |         |
| 10      | Civil foundation drawings  | 2 sets |         |
| 11      | Pre installation requirements  | 2 sets |         |
| 12      | Installation requirements  | 2 sets |         |
| 13      | Installation manual  | 2 sets |         |
| 14      | Technical literature, data sheets and equipment catalogues                         | 2 sets |         |
| 15      | DQ, IQ, OQ, PQ documents.  | 2 sets |         |
| 16      | Calibration Report of all sensors, controllers, PLC, transmitters, indicators etc. | 2 sets |         |
| 17      | Test Certificates of all material of construction                                  | 2 sets |         |
| 18      | Test Certificates of the software used in machine control / monitoring system.     | 2 sets |         |



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### ANNEXURE - XIII : TERMS AND CONDITIONS

|   |   |  |
|---|---|--|
| Delivery Period   | : | *  |
| Payment Terms   | : | As mentioned in tender.  |
| Packaging and forwarding  | : | <b>By Vendor</b>   |
| Un-loading at site  | : | By vendor /Supplier<br>(If required, help for the arrangements of unloading can be done by client)<br>Installation in position by the vendor under the client's <b>supervision</b> |
| Excise / Taxes /GST   | : | *  |
| Material for Trial arrangement  | : | * (To be arranged by client)   |
| Installation and Commissioning  | : | <b>By Vendor</b>   |
| <b>Submission of documents and drawings</b>   | : |  |
| Response to URS and submission of quotation   | : | Within 2 week  |
| Submission of detail functional design specification and schematic drawings                                   | : | Within a week after order finalization   |
| Submission of FAT / SAT specification   | : | 2 weeks before FAT   |
| Submission of IQ AND OQ documents   | : | With equipment delivery  |
| Drawings / diagrams   | : | Within a week after receiving PO   |
| The supplier should notify customer 2 weeks in advance of the beginning of FAT                                |   |  |
| Catalogue, Equipment drawing, List of clients and year of establishment to be submitted along with quotation. |   |  |
| <i>Any other terms, not mentioned above, also to be specified.</i>  |   |  |

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### ANNEXURE - XIV : ABBREVIATION

|     |       |   |   |
|-----|-------|---|---|
| 1.  | URS   | : | User Requirement Specification.                     |
| 2.  | HOMCO | : | Kerala State Homeopathic Co-operative Pharmacy Ltd. |
| 3.  | DQ    | : | Design Qualification                                |
| 4.  | IQ    | : | Installation Qualification                          |
| 5.  | OQ    | : | Operational Qualification                           |
| 6.  | PQ    | : | Performance Qualification                           |
| 7.  | SS    | : | Stainless Steel                                     |
| 8.  | RHS   | : | Right Hand Side                                     |
| 9.  | MOC   | : | Material of Construction                            |
| 10. | KW    | : | Kilo Watt   |
| 11. | HP    | : | Horse Power   |
| 12. | RPM   | : | Rotation Per Minute                                 |
| 13. | FLP   | : | Flame Proof   |
| 14. | cGMP  | : | Current Good Manufacturing Practices                |
| 15. | O&M   | : | Operation and Maintenance                           |
| 16. | GA    | : | General Arrangement                                 |
| 17. | SLD   | : | Single Line Diagram                                 |
| 18. | HOD   | : | Head of Department                                  |
| 19. | QA    | : | Quality Analysis                                    |
| 20. | MRP   | : | Maximum Retail Price                                |
| 21. | NMT   | : | Not more than                                       |
| 22. | VFD   | : | Variable frequency drive                            |
| 23  | FAT   | : | Factory Acceptance Test                             |
| 24  | SAT   | : | Site Acceptance Test                                |

**Any other details, not mentioned in Annexure I to XIII, to be specified in the quotation/specification by the vendor.**