(sponsored by government of Kerala & aided by govt. of India) Office: Pathirappally, Alappuzha, Kerala, India. Pin-688 521 Phone : 477 2258012 :477 2258665 Fax : 0477 2258012

Website : www.homcokerala.com

Email : <u>homcokerala@gmail.com</u>

Supplier's Copy

USER REQUIREMENT SPECIFICATION

Name of the Company		
Contact Person	:	
Address	:	
Contact Details	:	
Department	:	QCL LAB –First Floor
Equipment and Code No.	:	Hot Air Oven – Memmert Type
Name of work	:	Supply, Installation, Commissioning & Validation of cGMP model Microprocessor basedHot Air Ovenat M/s. HOMCO –Kerala
Ref. No.	:	
Date	:	
Enclosures	:	
Quantity	:	2 Nos.

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

:

Phone : 477 2258012 :477 2258665 Fax : 0477 2258012

Website : www.homcokerala.com Email : homcokerala@gmail.com

HOT AIR OVEN – MEMMERT TYPE

ANNEXURE - I

BASIC DETAILS OF THE MACHINE

	DES	CRIPTION			
(To be specified by the supplier, if any variation)					
Scope		Supply, Installation, Commissioning & Validation of cGMP model microprocessor basedHot Air Ovenalong with connecting accessories, cables etc. at M/s. HOMCO –Kerala			
Model	-	*			
Chamber Size		18" x 18" x 24" (W x D x H)			
Capacity		110 to 130 Liters *			
Rating	•	3000 Watts*			
Type of Shelves	•	Rod Type*			
Shelves	•	03 nos. *			
Temperature Range		+ 5°C above ambient to + 250°C*			
Temperature Accuracy	•	<u>+</u> 1°C *			
Temperature Uniformity		<u>+</u> 0.5°C *			

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

ANNEXURE – II, III : cGMP&OPERATIONAL FEATURES

(sponsored by government of Kerala & aided by govt. of India) Office: Pathirappally, Alappuzha, Kerala, India. Pin-688 521 Phone: 477 2258012 :477 2258665 Fax : 0477 2258012

Website : www.homcokerala.com Email : <u>homcokerala@gmail.com</u>

DESCRIPTION						
(To be specified by the supplier, if any variation)						
мос						
Pre-Heating Chamber		SS 304 (20 swg) *				
Outer Chamber	•	SS 304 (20 swg) *				
Inner Chamber	•	SS 304 (22swg) *				
Rod Shelves	8	SS 304*				
Door Gasket		Silicon (Food Grade) *				
Finish	•	Mirror Finish				

The machine should consist of:

- Should be triple walled in construction. Gap between the walls should be filled with high insulation low thermal mass glass wool. *
- > Unit should be incorporated with Microprocessor based Auto Tuning type PID

Temperature Indicating Controller with CE mark and dual display for Set & Process value indication. *

- Controller should have a built in Digital Timer to set the Soak time if desired in Hours or Minutes. *
- > Highly accurate Pt-100 3 wire RTD sensor should be used for sensing of temperature. *
- > Thermostatic high temperature safety cut off should be provided. *
- Door gasket of food grade silicon should be provided *
- Sufficient heating elements should be provided on side walls of the chamber so as to maintain uniformity in temperature within the chamber *

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

DESCRIPTION

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

Door gasket of food grade silicon should be provided*

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

	Website : www.homcokerala.com	Email : <u>homcokerala@gmail.com</u>
~	Door latch should be with stopper mad	de of solid heavy gauge SS. *
>	Equipment should be installed with mo circulation.*	otorized blower at the top for uniform air
>	Air circulation system required such as	s Forced Air Convection for uniform temperature*
>	Equipment should be supplied with NA 115ºC, 150ºC, 180ºC)*	ABL calibration certificate at points (80° C, 105° C
≻	Fan speed controller should be provide	ed*
≻	Should have 2 removable and adjusta	ble SS rod shelves/ tray*
≻	Should have safety cum standby Ther	mostat for protection from over temperature.*
>	Should have class 2 integrated indepe visual alarm*	ndent temperature safety device (DIN 12880) with
≻	Should have CE conformity marking ,	EAC, GS and UL certification*

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

ANNEXURE - IV : ELECTRICAL DETAILS

DESCRIPTION						
(To be specified by the supplier, if any variation)						
Standard Operating Frequency : 50 Hz						

(sponsored by government of Kerala & aided by govt. of India) Office: Pathirappally, Alappuzha, Kerala, India. Pin-688 521 Phone: 477 2258012 :477 2258665 Fax: 0477 2258012

Website : www.homcokerala.	com	Email : <u>homcokerala@gmail.com</u>
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		*
Major Cabling details		
For Main supply (In client's scope)	:	
For Main drive motor	:	*
End connection details	1	MCB or Socket should be with equipment
Earthing requirement	1	Arrangement should be with system
An Isolator Circuit breaker	•	To be supplied with machine at power supply in point of appropriate capacity by vendor. *

Website : www.homcokerala.com Email : homcokerala@gmail.com

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.*

(sponsored by government of Kerala & aided by govt. of India) Office: Pathirappally, Alappuzha, Kerala, India. Pin-688 521 Phone: 477 2258012 :477 2258665 Fax: 0477 2258012

Website : www.homcokerala.com Email : <u>homcokerala@gmail.com</u>

	DESCRIPTION				
(To be specified by the supplier, if any variation)					
Misce	llaneous:				
*	Wiring between Panel and the Machine should be in the Scope of Vendor. The exac 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. st				
*	Any deviation from this should be documented and communicated to HOMCO. st				
*	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. st				
*	Complete Earthing of Equipment. *				
*	Complete covering of Electrical Cables and Other Connections. *				

(sponsored by government of Kerala & aided by govt. of India) Office: Pathirappally, Alappuzha, Kerala, India. Pin-688 521 Phone: 477 2258012 :477 2258665 Fax: 0477 2258012

Website : www.homcokerala.com

Email : homcokerala@gmail.com

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. *

Equipmentshould not restart without human intervention. *

Equipmentshould 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*

(sponsored by government of Kerala & aided by govt. of India) Office: Pathirappally, Alappuzha, Kerala, India. Pin-688 521 Phone: 477 2258012 :477 2258665 Fax: 0477 2258012

Website : www.homcokerala.com

Email : <u>homcokerala@gmail.com</u>

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.

(sponsored by government of Kerala & aided by govt. of India) Office: Pathirappally, Alappuzha, Kerala, India. Pin-688 521 Phone: 477 2258012 :477 2258665 Fax: 0477 2258012

Website : www.homcokerala.com

Email : <u>homcokerala@gmail.com</u>

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 if required as per their system's drain requirement with pipe, nozzle size, valve etc.*					

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

ANNEXURE - VIII : MECHANICAL DETAILS

(sponsored by government of Kerala & aided by govt. of India) Office: Pathirappally, Alappuzha, Kerala, India. Pin-688 521 Phone: 477 2258012 :477 2258665 Fax: 0477 2258012

Website : www.homcokerala.com Email : hor

Email : <u>homcokerala@gmail.com</u>

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.)	ł	*			
Foundation details (If required)	•	*			

(sponsored by government of Kerala & aided by govt. of India) Office: Pathirappally, Alappuzha, Kerala, India. Pin-688 521 Phone : 477 2258012 :477 2258665 Fax : 0477 2258012

Website : www.homcokerala.com Email : homcoke

Email : <u>homcokerala@gmail.com</u>

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.

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

Website : www.homcokerala.com			lla.com	Email : <u>homcokerala@gmail.com</u>
		ANNEXURE - X	:	TRAINING REQUIREMENT
 X	-	of this lab item shoul		, Kerala for the Installation, commissioning , and provided by vendor and training record will be

> shall support client in execution of all the Qualification Phases.

(sponsored by government of Kerala & aided by govt. of India) Office: Pathirappally, Alappuzha, Kerala, India. Pin-688 521 Phone : 477 2258012 :477 2258665 Fax : 0477 2258012

Website : www.homcokerala.com	Email : <u>homcokerala@gmail.com</u>

Т

ANNEXURE - XI : APPROVED MAKES

Stainless Steel Sheet & Pipe: Tata / Jindal	:	*			
PLC: Siemens / Allen Bradely / Delta	:	*			
HMI: Siemens / Allen Bradely / Delta / Exor	:	*			
Cables: Finolex / Polycab	:	*			
 Any other components, not mentioned above, to be specified by the vendor. 					

 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.

(sponsored by government of Kerala & aided by govt. of India) Office: Pathirappally, Alappuzha, Kerala, India. Pin-688 521 Phone: 477 2258012 :477 2258665 Fax: 0477 2258012

Website : www.homcokerala.com Email : home

Email : <u>homcokerala@gmail.com</u>

ANNEXURE - XII : DOCUMENTATION

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

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

Website : www.homcokerala.com Email : homcokerala@gmail.com

ANNEXURE - XIII : TERMS AND CONDITIONS

Delivery Period	:	*
Payment Terms	:	As mentioned in tender.
Packaging and forwarding	:	By Vendor
Un-loading at site	:	By vendor /Supplier
		(If required, help for the arrangements
		of unloading can be done by client)
		Installation in position by the vendor
		under the client's supervision
Excise / Taxes /GST	:	*
Material for Trial arrangement	:	* (To be arranged by client)
Installation and Commissioning	:	By Vendor
Submission of documents and drawings		
Response to URS and submission of quotation	:	Within 1 week
Submission of detail functional design	:	Within a week after order finalization
specification and schematic drawings		
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.

Any other terms, not mentioned above, also to be specified.

(sponsored by government of Kerala & aided by govt. of India) Office: Pathirappally, Alappuzha, Kerala, India. Pin-688 521 Phone: 477 2258012 :477 2258665 Fax: 0477 2258012

Website : www.homcokerala.com

Email : <u>homcokerala@gmail.com</u>

ANNEXURE - XIV : AF

ABBREVIATION

1.	URS	:	User Requirement Specification.
2.	НОМСО	:	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.