

(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

TECA

MUMBA

Website: www.homcokerala.com

Email: homcokerala@gmail.com

## Supplier's Copy

# USER REQUIREMENT SPECIFICATION

Name of the Company	:	
Contact Person	:	
Address	:	
Contact Details	:	
Department	:	QCL-FIRST FLOOR
Equipment and Code No.	:	Fuming Hood
Name of work	:	Supply, Installation, Commissioning & Validation of cGLP model Fuming Hood at M/s. HOMCO –Kerala
Ref. No.	i	
Date		Charles Tops for the Control of the
Enclosures		
Quantity	:	1 No.



CONSULTANT: M/S. KNACK TECHNOCRATS

42, AVINASH, 7 BUNGALOWS, J.P. ROAD, ANDHERI (W), MUMBAI – 400 053 TEL. NO.: 022-2636 1629 / 2631 4010, Email: infoknack@gmail.com



(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

## FUMING HOOD

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

		DESCRIPTION		
(To be spe	cifie	d by the supplier, if any variation)		
Scope		Supply, Installation, Commissioning & Validation of cGLP model Fuming Hood along with connecting accessories, cables etc. at M/s. HOMCO –Kerala		
Model	i	*		
Design Structure	1	Aerodynamic, Floor Mounted. *		
Over All Fume Hood Dimension with Base Cabinet (mm)	i a H	1200 X 762 X 2400 (L x D x H).*		
Base Cabinet Dimension (mm)		780 X 625 X 700 (L x D x H). *		
Inside Fume Hood Working Volume (mm)		915 mm X 625 mm X 1150 mm. *		
Maximum Sash Opening	:	520 mm (Vertical rising counter-balanced Sash). *		
Centrifugal Blower	i	PP + FRP high efficiency remote blower Consisting of Continuous Rating Motor and Chemical Resistant Impeller. *		
Noise Level	:	<70db at 1 meter from Fume Hood. *		
Airflow Type	:	Low Constant Volume (For A.C. Environment). *		

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



CONSULTANT: M/S. KNACK TECHNOCRATS

42, AVINASH, 7 BUNGALOWS, J.P. ROAD, ANDHERI (W), MUMBAI - 400 0 TEL. NO.: 022-2636 1629 / 2631 4010, Email: infoknack@gmail.com



(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 - II & III : CGMP FEATURES AND OPERATIONAL FEATURES

		DESCRIPTION
	(To be speci	ified by the supplier, if any variation)
MOC		External Body Structure:  Anti-Corrosive Powder Coated, pre-treated with 8 Tank Chemical Processes and Powder Coated with Highly Chemical Resistant Epoxy Colors Having Dry Film Thickness Of 70 To 80 Microns. Should Pass All Conformity Performance Tests as Per IS Standard. * Internal Body Structure: Chemical (Especially Strong Acid Like H2SO4 And HNO3) Resistant & Heat Resistant, Fire Retardant, Smooth Finish, Easily Cleanable Panels. *
Finish		*

## The machine to consist of:

- Should have easily open able hinged top Panel for Easy Access to flow Control valve and electrical lighting fixtures for maintenance. \*
- Chemical resistant splash & spillage proof should be made by jet black granite. (2cm Thickness). \*
- Should have Oval/Round shaped 100mm X 200mm sink for drainage with water tap. \*

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



CONSULTANT: M/S. KNACK TECHNOCRATS

42, AVINASH, 7 BUNGALOWS, J.P. ROAD, ANDHERI (W), MUMBAI – 400 05 TEL. NO.: 022-2636 1629 / 2631 4010, Email: infoknack@gmail.com



(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

## DESCRIPTION

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

- Sash Should be vertical rising counter-balanced with Toughened Float Glass (6mm Thick). \*
- Shutter should be clear openable with fail safe locking arrangement to prevent sudden breakdown of shutter. \*

breakdown of shutter.	
	Remotely operated color-Coded brass needle valves for fine control over utilities total 4nos service valves with PU plumbing with 6mm internal Dia. withstands up to 5kgf Pressure.
Wet & Dry Service Fittings	• For Raw Water – 1 no. *
	• For Nitrogen – 1 no. *
	For Vacuum - 1 no. *
,	For Compressed Air – 1 no. *
Lighting	: Fluorescent light with Vapor-Proof fitting for proper illumination. 40 Watt - 1no. *
Electrical Utilities	<ul> <li>Five nos. electrical sockets and switch. *</li> <li>Light switch on front facia. *</li> <li>cables &amp; wires 'fire retardant' grade on right hand side. *</li> </ul>
Cable Entering Port	: Easy access of cables from fume hood to electrical sockets. *
Maintenance Ports	: Openable top panel for easy maintenance of tube light and flow control valve, triangular service panel for maintenance of utility valves and tubing. *

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



CONSULTANT: M/S. KNACK TECHNOCRATS

42, AVINASH, 7 BUNGALOWS, J.P. ROAD, ANDHERI (W), MUMBAI – 400 053
TEL. NO.: 022-2636 1629 / 2631 4010, Email: infoknack@gmail.com



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

: 0477 2258012

Website : www.homcokeral	a.com	Email : homcokerala@gmail.com
(To be specifie		CRIPTION ne supplier, if any variation)
Chemical Storage Base Cabinet	:	<ul> <li>Internal special chemical resisting material lining to the cabinet walls two exhaust ports connected to the fume hood exhaust system internally. *</li> <li>Complete powder coated. rigid structure to support fume hood. *</li> <li>One removable horizontal partition to store chemicals. *</li> <li>Double skin hinged doors with hinges made of polyamide for chemical resistance and hassle-free operations in the corrosive lab</li> </ul>
		<ul> <li>atmosphere. *</li> <li>PP trays for chemical storage. *</li> <li>Fully openable back panels for service line access. *</li> </ul>
Apparatus Holding Grid	-	Should have a grid made up of MS powder coated rod (dia. 12.7mm) to hold the apparatus which should cover the entire length of the fume hood and built-in at fume hood backside, installed at the distance of 150mm from backside of fume hood. *
Level Adjusting Screws	# # # # # # # # # # # # # # # # # # #	Should made of pp bolts to adjust the fume hood level by ±10mm. *

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



CONSULTANT: M/S. KNACK TECHNOCRATS

42, AVINASH, 7 BUNGALOWS, J.P. ROAD, ANDHERI (W), MUMBAI - 400 053 TEL. NO.: 022-2636 1629 / 2631 4010, Email: infoknack@gmail.com



(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

(To be specified	CRIPTION he supplier, if any variation)
Centrifugal Blower	Silent PP + FRP high efficiency remote blower, should consist of continuous rating motor and chemical resistant impeller Which should be dynamically balanced.*
Ducting	<ul> <li>Chemical resistant PP 2.5kg rigid &amp; flexible duct work from fume hood to exhaust stack point with weather proof canopy. *</li> <li>Total ducting with horizontal, vertical members, flanges, bends, bracketed support sand gooseneck exhaust stack duct via 177mm. *</li> </ul>
Air Suction Capacity	600 cfm confirming to international phase velocity norms and as per safe fume hood airflow pattern. *





(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 - IV

ELECTRICAL DETAILS

(To be specified		CRIPTION ne supplier, if any variation)
Standard Operating Frequency		50 Hz
Standard Operating Voltage		230 / 415V*
Total power consumption		* The Incomment of the Comment of th
Motor Details with rpm	:	* Trays or 5.7.7 to eyerT
Gear Box Details (If any)	1	* Cable youlded feet Luciania *
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		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.

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



CONSULTANT: M/S. KNACK TECHNOCRATS

42, AVINASH, 7 BUNGALOWS, J.P. ROAD, ANDHERI (W), MUMBAI – 400 053

TEL. NO.: 022-2636 1629 / 2631 4010, Email: infoknack@gmail.com

MUMP ...



(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

Phone: 477 2258012 :477 2258665 Fax: 0477 2258012

## DESCRIPTION

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

## 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. \*

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





CONSULTANT: M/S. KNACK TECHNOCRATS

42, AVINASH, 7 BUNGALOWS, J.P. ROAD, ANDHERI (W), MUMBAI – 400 053 TEL. NO.: 022-2636 1629 / 2631 4010, Email: infoknack@gmail.com



(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. \*

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\*





(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

是以假证人

Website: www.homcokerala.com

Email: homcokerala@gmail.com

ANNEXURE - VI : UTILITY REQUIREMENT

(То	be specifie	DESCRIPTION  ed by the supplier, if any variation)
Vacuum	10 mm	* The equipment are the equipm
Compressed Air		Ordinary *
		Non-Lubricated *
If any other utility		
		a least a respective description

<sup>\*</sup> 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: homcokerala@gmail.com

ANNEXURE - VII : C

CLEANING TECHNIQUE

(To be spe		SCRIPTION the supplier, if any variation)
Mode of machine cleaning		*
Use of Lubricants	1	*
All contact parts should be easily	dismantle	ed and cleanable. *
Drain points: Vendor should spe per their system's drain requiren		ipe size and location of drain points if required as pipe, nozzle size, valve etc.*







(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 - VIII

## MECHANICAL DETAILS

<b>DESCRIPTION</b> (To be specified by the supplier, if any variation)				
Dimension (In mm)	9	*	Mode of maining	
Net Weight (In Kgs.)		*	Use of Lubricania	
Type of Packing		*	a to a late to be be the	
Case Dimension (In mm)		*	turna ar ar militar masa	
Gross Weight (In Kgs.)		*		
Foundation details (If required)		*	and been made even selection.	





(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

Email: homcokerala@gmail.com

Website: www.homcokerala.com

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) \*
- 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)

Details of Bought out components to be specified.

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 Phone: 477 2258012 :477 2258665

Fax : 0477 2258012

Website: www.homcokerala.com

Email: homcokerala@gmail.com

## ANNEXURE - X

#### TRAINING REQUIREMENT

- > Training to all concern of M/s. HOMCO, Kerala for the Installation, commission and validation of this lab item should be provided by vendor and training record will be documented.
- Vendor 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: homcokerala@gmail.com

## ANNEXURE - XI : APPROVED MAKES

Stainless Steel Sheet & Pipe: Tata / Jindal		*	Sr. No.
PLC: Siemens / Allen Bradely / Delta	-	*	Design and over
HMI: Siemens / Allen Bradely / Delta / Exor		*	control mayrae 3
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: homcokerala@gmail.com

### ANNEXURE - XII

## DOCUMENTATION

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	moved castela 3
4	Maintenance manual	2 sets	o year
5	Spare parts manual	2 sets	At the c
6	All engineering drawings	2 sets	
7	List of instruments	2 sets	TALLE .
8	Calibration certificates	2 sets	
9	Warranty / Guarantee	2 sets	3
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	ACCOMPANY OF THE PARTY AND A STATE OF THE PARTY AND ASSESSMENT OF THE PARTY ASSESSMENT OF THE
19	Test Certificates of the software used in machine control / monitoring system.	2 sets	-



CONSULTANT: M/S. KNACK TECHNOCRATS

42, AVINASH, 7 BUNGALOWS, J.P. ROAD, ANDHERI (W), MUMBAI - 400 053 TEL. NO.: 022-2636 1629 / 2631 4010, Email: infoknack@gmail.com

MUSE



(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 - XIII : TERMS AND CONDITIONS

Delivery Period	:	* Anu Carlo
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 <b>supervision</b>
Excise / Taxes /GST	:	*
Material for Trial arrangement	:	* (To be arranged by client)
Installation and Commissioning	:	By Vendor
Submission of documents and drawings		× 100 mm
Response to URS and submission of quotation	:	Within 1 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.

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

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



CONSULTANT: M/S. KNACK TECHNOCRATS

42, AVINASH, 7 BUNGALOWS, J.P. ROAD, ANDHERI (W), MUMBAI – 400 053 TEL. NO.: 022-2636 1629 / 2631 4010, Email: infoknack@gmail.com

17

MUMBA! 400 053



(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 - XIV : 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.	мос		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.



CONSULTANT: M/S. KNACK TECHNOCRATS

42, AVINASH, 7 BUNGALOWS, J.P. ROAD, ANDHERI (W), MUMBAI – 400 053
TEL. NO.: 022-2636 1629 / 2631 4010, Email: infoknack@gmail.com

18