

Equipment Specification Data Sheet

Equipment Name: Table top cooling centrifuge

Document No.: DS-TCC 01

Revision: 02

Project No.: 120310

Project Name: Integrated Vaccines Complex, Chengalpattu


Block Code	Block Name	Identification No.	Capacity	Quantity
G1	Animal Block	G1-TCC-01	-	1


NNE Pharmaplan India Limited


Name	Designation	Signature	Date
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HLL Biotech Limited

Name	Designation	Signature	Date
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HLL Biotech Limited, Chennai		
nne pharmaplan	INTEGRATED VACCINES COMPLEX, CHENGALPATTU	
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 HLL BIOTECH LIMITED <small>Subsidiary of HLL Lifescare Limited a Government of India Enterprise</small>		
1	Process requirements	
1.1	The Table top cooling centrifuge shall be used for the separation of cellular components, blood samples.	
2	Equipment ID	
2.1	G1-TCC-01	
3	Technical Specification	
3.1	Model	cGMP model
3.2	Type	Table top cooling centrifuge
3.3	Temperature range	-10 °C to 40 °C
3.4	Temperature control	± 2 °C
3.5	Electrical Consumption	Vendor to specify
3.6	Speed range	Maximum speed 15,000 RPM (in 10 RPM increments)
3.7	Rotor included	Yes
3.8	Rotor capacity	48 positions for 1.5 ml / 2.0 ml with lid and 6 positions for 50 ml tubes including rotor lid.
3.9	Rotor	fixed Angle rotor
3.10	Quantity	1 No.
3.11	Power Requirement	To be compatible with standard Indian power supply socket.
3.12	Accuracy	± 10 rpm.
3.13	Control system	Microprocessor based with digital control
3.14	External Dimensions, (W x H x D)	Vendor to specify.
4	Material of Construction	
4.1	Outer body	Vendor to specify. The MOC of the outer body should be corrosion resistant and stain resistant
4.2	Rotor	Vendor to confirm
5	Specific Equipment Requirements	
5.1	Seamless, splash proof key pad with characteristic symbols should be provided for easy operation.	
5.2	Audible and optical alarms to indicate the end of operation and to indicate other abnormality conditions	
5.3	Rotor imbalance alarm should be given	
5.4	Warning measures for high and low temperature control.	
5.5	Hinged type top cover should be provided, that can be operated using single hand	

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5.6	Electronic monitoring, to display the cause in case of any fault		
5.7	Cooling mechanism should be provided to maintain the uniform temperature throughout the Operation.		
5.8	The instrument should be designed for explosion-proof		
5.9	The cleaning shall be able to be done manually		
5.10	On power failure the instrument should run under alternate power supply without interruption of the operation.		
5.11	Low access height for easy loading and unloading of samples should be provided.		
6	Other Requirements		
6.1	LCD shall display the actual parameters: speed, time, relative centrifugal force		
6.2	View ports for independent speed verification		
6.3	Brushless motor-maintenance free		
6.4	Rubber suction feet for stability		
6.5	Timer: Up to 9 hours, 1 min to 99 minutes with continuous mode, short spin		
6.6	Automatic rotor recognition to sense rotor type to set maximum allowable speed and with speed limitation for maximum safety.		
6.7	Fast temperature function for fast pre-cooling.		
6.8	Centrifuge lid with soft touch lid closer.		
6.9	Standby cooling function holds temperature when centrifuge is not in use.		
6.10	Suitable adapters shall be provided for different rotors.		
6.11	Equipment shall be compatible for cleaning with all standard disinfectant.		
6.12	Training/Demo for users on operation and cleaning to be provided		
7	Regulatory Aspects		
7.1	CE certification		
8	Safety Requirements		
	Following facilities must be provided to protect personnel and equipment:		
8.1	Appropriate closure of all parts of an instrument is essential.		
8.2	Proper earthing is necessary.		
8.3	On power failure equipment should come in fail safe condition		
8.4	It should not start when lid is open		
8.5	Lid should not be possible to be opened while spinning		

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9	Documents	
	Following documents, but not limited to these, are expected from the vendor as part of the supply package in hard copy as well as editable electronic file:	
9.1	IOQ Documents.	
9.2	Operation and maintenance manual shall be provided along with IOQ documents during Installation at site.	
9.3	Warranty letter for 1 year from the date of supply.	
9.4	Calibration certificate of critical instruments with respect to the traceable national reference standard instrument and their calibration procedure.	
9.5	List of make with certificate should be provided.	
10	Timelines	
10.1	Not applicable	
11	Preferred list of Makes	
11.1	Eppendorf, Thermo, Rota.	
	NOTE: Accurate size and technical specification need to be mentioned by the vendor	

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Table-1: Equipment location						
Equipment ID	Block Name	Room Name	Room No	Room dimension in mm	Room height in mm	
G1-TCC-01	Animal house	Lab area-testing	G1G055	4700 X 7300	2700	
Table-2: Change Log						
Date	Name	Revision	Section	Change/Comment		
11-07-2014	Niharika Ruhela	00	-	New document		
06-01-2015	Yogesha M J	01	All	Updated as per comments given by HBL team during meeting dated 06-01-2015 at HBL office		
29-04-2015	Niharika Ruhela	02	All	Updated as per comments given by HBL team dated 27-02-2015.		
Table-3: Annexure						
Not applicable						