

Equipment Specification Data Sheet

Equipment Name: Hot plate

Document No.: DS-HTP 01

Revision: 00

Project No.: 120310

Project Name: Integrated Vaccines Complex,  
 Chengalpattu

Block Code	Block Name	Identification No.	Capacity	Quantity
QC	Admin, QA & QC	Q1-HTP 01, 02, 03	-	3

**NNE Pharmaplan India Limited**

Name	Designation	Signature	Date
<b>Prepared by</b>			
Ms. Niharika Ruhela	Process Engineer	for Sanderup	11-02-2016
<b>Checked by</b>			
Mr. Yogesha M J	Process Engineer	Yogesh-mj	11-02-2016
<b>Approved by</b>			
Dr. Harshad Mali	Lead - Process Engineer	for Amuntam	11/02/2016

**HLL Biotech Limited**

Name	Designation	Signature	Date
<b>Reviewed by</b>			
User department: SANDHEEY KUMAR R Quality Control	Manager	Ssk	15/02/2016
Project / Engineering department VIGNESH KARAN J	DM-PROJECTS	T. wignesh	15/2/16
<b>Approved by</b>			
Head of the department: V. SIVA GANESH Quality Control	Manager	V. Siva Ganesh	15/02/2016
Head of the department (QA) R. SURESH K	DM - Q.C & Q.A	R. Suresh K	17.02.2016
<b>Authorized by</b>			
RAMAN . K . R.	C.E-O	Raman	19.2.16



## Equipment Specification Data Sheet

HLL Biotech Limited, Chennai

<b>nne pharmaplan®</b>	<b>INTEGRATED VACCINES COMPLEX, CHENGALPATTU</b>		 <small>HLL BIOTECH LIMITED (Subsidiary of HLL (India) Limited (A Government of India Enterprise))</small>
	Equipment Name	Hot plate	
	Project #	120310	
	Document #	DS-HTP 01	

<b>1</b>	<b>Process requirements</b>
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1.1	Hot plates with stirres shall be used for heating the soutions and mixing the heated liquid for homogeneity
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<b>2</b>	<b>Equipment ID</b>
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2.1	Q1-HTP 01,02,03
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<b>3</b>	<b>Technical Specification</b>
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3.1	<b>Hot plate</b>	
3.2	Temperature range	30 to 500 °C
3.3	Atemperature accuracy	±1 °C
3.4	Resolution	±1 °C
3.5	Sensor Type	PT100 (Vendor to confirm)
3.6	Temperature Display	LED
3.7	Heater Power (Watt)	Vendor to confirm
3.8	Plate dimension	Vendor to confirm
3.9	<b>Stirrer</b>	
3.10	Type	Electromagnetic stirrer
3.11	Stirrer Speed	100 - 2000 rpm (Client to confirm)
3.12	Maximum stirring capacity	10 L
3.13	PMDC motor for high torque	Yes

<b>4</b>	<b>Material of Construction</b>
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4.1	Top plate	GMP compliant (SS, ceramic or equivalent)
4.2	Body	Vendor to confirm

<b>5</b>	<b>Specific Equipment requirment</b>
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5.1	Microprocessor control feed back shall be considered
5.2	Power indicator should illuminate when the equipment is coonected properly to the power supply
5.3	Hot warning light should be active when plate is hot even if the equipment is plugged off.
5.4	Hot warning light should flash once the temperature is reached 50 °C
5.5	Top plate should be acid and Alkali resitant and easy to clean



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**INTEGRATED VACCINES COMPLEX,  
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- 5.6 Top plate should be flat for uniform and stable heating
- 5.7 Three display system for Heat, Stiring speed and time shall be considered
- 5.8 The equipment should provide a better speed regulation even with small volumes and low speeds
- 5.9 User programmable pre set buttons to recall upto three temperature/ stirring speeds
- 5.10 Base should be levelled properly and strongly to provide stability during the operations

### 6 Other requirement

- 6.1 Training and demo for user on operation and cleaning to be provided

### 7 Regulatory aspects

- 7.1 CE certification

### 8 Safety requirements

- 8.1 Proper earthing is necessary
- 8.2 Cord retention bracket should be considered to prevent loose cord connect to the hot plate

### 9 Documents

- 9.1 **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**
- 9.3 Operation and maintenance manuals shall be provided along with IOQ documents during installation at site
- 9.4 Warranty Letter for Minimum 1 year from the date of supply.
- 9.5 Vendor should provide list of standard spare parts with ordering information.
- 9.6 NPL traceable calibration certificates and calibration procedures
- 9.7 Vendor should provide list of change parts (if applicable) with ordering information

### 10 Timelines

- 10.1 Not Applicable

### 11 Preferred list of Makes

- 11.1 IKA, Thermofischer Scientific, Cole Parmer

**NOTE:** Accurate size and technical specification need to be mentioned by the vendor



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**TABLE NO: 1**

Equipment ID	Block Name	Room Name	Room No	Room dimension in mm	Room height in mm
Q1 HTP 01-02	Admin, QA & QC	Media Preparation	Q1S052	-	-
Q1 HTP 03	Admin, QA & QC	Chemical lab	Q1S022	-	-

**Table-2: Change Log**

Date	Name	Revision	Section	Change/Comment
19-10-2015	Niharika Ruhela	00	-	New document

**Table-3: Annexure**

Not applicable

