

Equipment Specification Data Sheet

Equipment Name: Garment Washing Machine

Document No.: DS-GWM 01

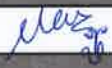
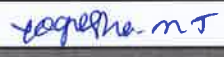

Revision: 01

Project No.: 120310




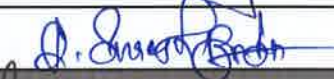

Project Name: Integrated Vaccines Complex, Chengalpattu


Block Code	Block Name	Identification No.	Capacity	Quantity
G12	CENTRAL CHANGE ROOM & LAUNDRY	Q1-GWM 01-02	50	2
G12	CENTRAL CHANGE ROOM & LAUNDRY	Q1-GWM 03-04-05-06-07	30	5



NNE Pharmaplan India Limited



Name	Designation	Signature	Date
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HLL Biotech Limited

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DATASHEET			
HLL BIOTECH LIMITED, CHENNAI			
nne pharmaplan	INTEGRATED VACCINES COMPLEX, CHENGALPATTU		
	Garment Washing Machine		
	Project # 120310		
	Document # DS-GWM 01		
1	Process requirements		
1.1	To wash and extract the water of clean room garments		
2	Equipment ID	Minimum Capacity (Kg)	Quantity (no's)
2.1	G12-GWM-01-02	50	2
2.2	G12-GWM-03-04-05-06-07	30	5
3	Technical Specification		
3.1	Model	cGMP (Industrial)	
3.2	Type	Double door, loading from front side and unloading from rare side of the machine, automatic washer cum dryer	
3.3	Drum Speed, Wash Speed, Spin speed, G-Factor Spin	Vendor to specify	
3.4	Operating temperature	Vendor to specify	
3.5	Heating	Electrical / Steam	
3.6	Inlet Connection	PW (Purified Water)	
3.7	Door Hinge	Vendor to specify	
3.8	Protection for motor	IP 54	
3.9	Electrical Requirement	To be compatibility to the standard Indian Power supply sockets	
3.9	Chamber dimention (W x D x H) mm	Vendor to specify, as per capacity	
3.9	External dimention (W x D x H) mm	Vendor to specify, as per capacity	
3.4	Number of Compartments	2	
3.5	Washing speed, RPM	Vendor to specify, as per capacity	
3.6	Max. spin speed, RPM	Vendor to specify, as per capacity	
4	Material of Construction		
4.1	All contact parts with garments (Cabinets, inner drum, tub, inlet	SS 304	
5	Specific Equipment requirement		
5.1	Machine should be provided with Micro processor based control system.		
5.2	Electronic frequency drive motor to be provided for variable working and spin speed.		
5.3	One dispenser for additives with pump must be provided. ( Normally 10-15 gm of common detergent per Kg of clothes)		
5.4	The cylinder beaters should be designed to ensure a gentle, rapid and uniform treatment of all fabrics.		
5.5	The mechanical parts shall be properly covered & sealed so that only SS parts are exposed inside the clean room.		
5.6	Door should be suitably big for easy loading and unloading of garments.		
5.7	Acceleration and Braking should be gradual and adjusted via VFD/Electronically.		
5.8	Toughened glass view panel to be provided in the door with proper leakproof sealing		
5.9	Door interlock with motor functioning shall be provided.		
5.10	Overload protection/ Indication & alarm shall be provided		
5.11	Water filling / Draining shall be controlled by control panel		

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5.12	Machine shall be provided with inbuilt extractor facility for the clothes also with spinning drum	
5.13	Machine shall be provided with balance control.	
5.14	Foundation for the machine and erection of the same under the scope of the supplier.	
5.15	Machine should have total water protection	
5.16	Machine should be programmable for specific linen type and specific linen processing.	
5.17	Memory presettings for different washing cycles.	
5.18	LED display to indicate the progress of the cycle.	
5.19	Proper earthing should be provided. Client will provide earthing through the incoming power supply cable. Necessary termination to be provided in the termination point.	
5.20	Drain connection with drain hose (Up to drain point in Vendor scope). Vendor to ensure that water flows out gradually, or providing necessary sealings with the floor traps so that water doesn't not gush out turbulently during drain.	
5.21	Energy efficiency class B	
5.22	Utility Consumption (Vendor to Specify): Purified Water consumption/ cycle:..... Pure steam consumption:..... Electricity Consumption:.....	
5.23	Vendor to Specify: Drum Size as per capacity shall be considered (Minimum, dry weight of laundry) :..... Drum minimum/ maximum RPM : ..... % of drying :.....	
6	<b>Other requirement</b>	
6.1	All the wiring should be neatly dressed in PVC cable trays with Covers	
6.1	All Electrical parts including the MCB's, Relays, connectors etc must be fixed on DIN Rails/Fixed boards for easy Maintenance	
6.1	All connections inside must be provided using Terminal Blocks/connectors fixed on DIN Rail / fixed board. No Open Joints are allowed	
6.1	All connections to the terminal block/connectors are to be done using 'Cable lugs with Insulation' of appropriate sizes and the same has to be crimped tightly	
6.1	Proper Ferruling and Tagging of every individual cable (Control & Power)	
6.1	All Electrical Components like, VFDs, Relays, Terminal Blocks etc. must be tagged. This should reflect in the Wiring Diagram to be Submitted along with other documents	
6.1	A wiring Diagram incorporating and matching with the cables laid should be provided with the machine	
6.1	The electrical Wiring Diagram with the Operating Manual, should be explicitly provided by vendor.	
6.2	All bolts, nuts on the exterior part of equipment should be with cap head or cap nut	
6.3	There should be no crevices, so as to avoid dust accumulation	
7	<b>Regulatory guidelines / standards</b>	
7.1	Not Applicable	
8	<b>Safety requirements</b>	
	<b>Following facilities must be provided to protect personnel and equipment:</b>	
8.1	Appropriate closure of all parts	
8.2	On power failure equipment should come in failsafe condition	
8.3	Appropriate closure of all parts	

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8.4	Proper earthing is necessary	
8.5	Doors interlocking alarm (visual/ audio).	
8.6	Noise level should be below 65 decible at a distance of 1m from the equipment	
8.7	System shall be insulated properly	
9	<b>Documents</b>	
	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 document	
9.2	Operation and maintenance manuals shall be provided along with IOQ documents during installation at site	
9.3	Calibration certificate of critical instruments with respect to the traceable national reference standard instrument and their calibration procedure.	
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	Vendor should provide list of change parts (if applicable) with ordering information.	
10	<b>Timelines</b>	
10.1	Not Applicable	
11	<b>Timelines</b>	
11.1	Not Applicable	
	<b>NOTE:</b> Accurate size and technical specification need to be mentioned by the vendor	