

# USER REQUIREMENT SPECIFICATIONS FOR 3 WAY DYNAMIC PASS BOX

Name of Equipment	: 3 way Dynamic Pass Box
<b>Document Number</b>	:
Date of Issue	:
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#### 1. PREPARATION & APPROVAL SHEET:

#### Prepared by

Name	Signature	Date	Department
			Quality Control

#### Checked by

Name	Signature	Date	Department

## Approved by

Name	Signature	Date	Department



#### 2. LIST OF GENERAL COMPONENT:

S.No.	Description		
1.	Main Cabinet		
2.	Final HEPA Filter		
3.	Pre-filter Pre-filter		
4.	Fresh Air Filter		
5.	Blower and Motor Assemblies		
6	Magnehelic Gauge for HEPA filter pressure		
7	Atmosphere Nozzle		
8	Door release button		
9	Electro-magnet Interlocking		
10	Power Supply Plug		
11	DOP Port		
12	ON/OFF Switch		
13	UV Light		
14	Hour Meter		
15	Switch Socket		
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#### 3. GLOSSARY:

Abbreviation	Description	
URS	User requirement specifications	
DQ	Design Qualification	
IQ	Installation Qualification	
OQ	Operational Qualification	
PQ	Performance Qualification	
Pa	Pascals	
HEPA	High Efficiency Particulate Air	
SS	Stainless Steel	
HP	Horse power	
RPM	Rotation Per Minute	
MOC	Material of Construction	
μ	Micron	
EU	Europe Union	



#### 4. TECHNICAL:

S.No.	Parameters	Required Specifications
4.1	General	
4.1.1	Description	This specification is intended to cover the minimum requirements to be met by the vendor in the design, manufacture and supply of 3 way Dynamic Pass Boxes.
4.1.2	Use	The Equipment to be used for clean sterile operations to avoid cross contamination of the facility
4.1.3	Field Identification	Shall be installed at Microbiology Lab
4.2	Salient Features	
4.2.1	General	For Class 100 / Grade A environment. An ISO Class 5, Bio-Containment Work Station features inward airflow for personnel protection. The downward HEPA filtered airflow ensures product protection while the HEPA filtered exhaust air takes care of environmental protection.
4.2.2	<b>Material of Construction</b>	SS304/SS 316 L
4.2.3	Finish	Visually good
4.2.4	Electrical Construction	Non flameproof / flameproof.
4.3	Operational requirements	Operating requirement based capacity mentioned below:
4.3.1	Capacity	(W) 900 mm X (D) 900 mm X (H) 1200 mm
4.3.2	Control Parameter	<ol> <li>Temperature Sensor and humidity sensor shall be installed in return air path.</li> <li>Noise level should not be more than 90dB from 1 meter from the AHU.</li> </ol>
4.3.3	<b>Desired Accuracy</b>	NA
4.3.4	Control	NA
4.3.4.1	Data & Security	NA



S.No.	Parameters	Required Specifications
4.3.4.2	User interface with supervisors and operators for the control platform Interface with other Equipment and system	NA
4.3.4.3	Security level	Motor: Totally Enclosed, Fan Cooled (TEFC) Squirrel cage induction flame proof motor with IP 55 Protection.
4.3.4.4	Data collection	NA
4.3.5	<b>Component Reference details</b>	YES
4.3.6	Functional Requirements	Functional Requirement of Filters: EU 4 Filter: EU 4 filters having an efficiency of 90 % down to 10 $\mu$ . EU 5 Filter: EU-5 Filters having efficiency 95% down 5 $\mu$ . EU 7 Filter: EU 7Fine filters having an efficiency of 98% down to 3 $\mu$ , EU 9 Filter: EU 9 Filters having an efficiency of 98% down to 1 $\mu$ . ACROSS FILTER STAGE D.P monitoring require.
4.3.7	Alarm System	Preferably the sound alarms/beep shall be provided along with light indication shall be part of BMS.
4.3.8	Power failure / recovery	In the event of a power failure, the system shall protect product against damage. The system will stop in a safe mode automatically upon loss of electricity, air or other major utility and will require operator intervention to Restart.
4.3.9	<b>Emergency stop</b>	The emergency stop mechanism(s) shall be provided. Fire Damper shall be provide (Fusible Link).
4.4	Utilities	Electricity, HVAC Drain, UPS and other utilities shall be discussed as needed.
4.5	Maintenance	Supplier should provide the following maintenance instructions,  i. Operation and Maintenance manuals along with as built drawings  ii. Daily checks on machine Cleaning procedures.
4.6	Inspection and Testing	Not Applicable
4.7	Commissioning and	• IQ/OQ/PQ to be completed by the supplier along with



S.No.	Parameters	Required Specifications
	Documentation	<ul> <li>M/s Panacea representatives.</li> <li>The Supplier to demonstrate the Performance of the machine at User site as per agreed terms.</li> </ul>
4.7.1	Development	The Supplier shall provide a Project Manager for the project to provide a single communication point with the User.
<b>4.8</b> 4.8.1	Training Start up support	Supplier to train the respective technical associates of Panacea Biotec Limited on operation, maintenance and cleaning of the equipment wherever applicable.  Telephone / Fax / E mail ID / Address
4.8.2	Post start up support	Replacement parts availability list (normal lead times shall be listed) System improvements (supplier shall notify user of any improvements).
4.9	Packaging	Supplier to specify packaging of machine for safe transportation and delivery at the site.
4.10	Deviations	Any deviation from URS shall be highlighted.
4.11	Delivery	As per Purchase Order.